

William B. Ruger Chair
of National Security Economics Papers



William B. Ruger Chair Workshop
Naval War College
Newport, Rhode Island
6–8 November 2006

Number 2

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE NOV 2006		2. REPORT TYPE		3. DATES COVERED 00-00-2006 to 00-00-2006	
4. TITLE AND SUBTITLE Economics and Maritime Strategy: Implications for the 21st Century				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval War College, William B. Ruger Chair of National Security Economics, 686 Cushing Road, Newport, RI, 02841-1207				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 146	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

William B. Ruger Chair of National Security Economics Papers

Number 2

Economics and Maritime Strategy: Implications for the 21st Century

Proceedings

A Workshop Sponsored by the
William B. Ruger Chair of National Security Economics
Newport, Rhode Island
6–8 November 2006

Richmond M. Lloyd, editor
William B. Ruger Chair of National Security Economics



Naval War College
Newport, Rhode Island

The Naval War College expresses appreciation to the Naval War College Foundation, through the generosity of the William B. Ruger Chair of National Security Economics, in the preparation and presentation of this workshop.

The views expressed in the William B. Ruger Chair of National Security Economics Papers are those of the authors and do not necessarily reflect the opinions of the Naval War College or the Department of the Navy.

Correspondence concerning the Ruger Papers may be addressed to Richmond M. Lloyd, William B. Ruger Chair of National Security Economics, Naval War College, 686 Cushing Road, Newport, RI 02841-1207; by telephone at 401.841.3669; or by e-mail at richmond.lloyd@nwc.navy.mil. Our website is <http://www.nwc.navy.mil/nsdm/Rugerpapers.htm>.

ISBN 978-1-884733-42-0

Printed in the United States of America

Contents

Introduction	1
Developing a New Maritime Strategy	3
Workshop Agenda	5
Opening Remarks	9
<i>Rear Admiral Jacob L. Shuford, USN</i> <i>President, U.S. Naval War College</i>	
Panel I: Maritime Strategy in a Globalizing World	11
Stability and Change in U.S. Grand Strategy	13
<i>Dr. Barry R. Posen, Ford International Professor of Political Science,</i> <i>Massachusetts Institute of Technology</i>	
Maritime Strategy in a Gobalising World	19
<i>Dr. Geoffrey Till, Professor of Maritime Studies,</i> <i>Defence Studies Department, King's College London</i>	
The United States and Maritime Strategy: A Parochial View from Newport.	25
<i>Dr. Timothy D. Hoyt, Professor of Strategy and Policy,</i> <i>U.S. Naval War College</i>	
Panel I Summary of Discussion	31
<i>Moderator: Dr. John H. Maurer, Chairman, Strategy and Policy</i> <i>Department, U.S. Naval War College</i>	
Panel II: Economic Prosperity and Maritime Strategy	33
Economic Prosperity and Maritime Strategy	35
<i>Dr. Richard N. Cooper, Maurits C. Boas Professor of International</i> <i>Economics, Harvard University</i>	
Asia's New Wealth and Its Implications for Maritime Strategy	39
<i>Dr. Ellen L. Frost, Visiting Fellow, Institute for International Economics,</i> <i>and Adjunct Research Fellow, Institute for National Strategic Studies,</i> <i>National Defense University</i>	
Panel II Summary of Discussion	45
<i>Moderator: Dr. Peter Dombrowski, Chairman, Strategic Research</i> <i>Department, U.S. Naval War College</i>	
Panel III: Economics and Emerging Maritime Powers	49
India and the United States: Economic, Strategic, and Maritime Implications	51
<i>Dr. Stephen Philip Cohen, Senior Fellow, Foreign Policy Studies</i> <i>Program, Brookings Institution</i>	

“Economics” and Established Maritime Powers: Resource Implications of the New Maritime Strategy	55
<i>Robert O. Work, Senior Defense Analyst, Center for Strategic and Budgetary Assessments</i>	
China’s Economic Rise: Impact on U.S.-Australian Alliance	73
<i>Dr. Leif R. Rosenberger, Economic Adviser, U.S. Pacific Command</i>	
Panel III Summary of Discussion	77
<i>Moderator: Dr. Mackubin Thomas Owens, Associate Dean of Academics for Electives and Directed Research and Professor of National Security Decision Making, U.S. Naval War College</i>	
Panel IV: Terrorism, Proliferation, Transnational Crime, and Migration	79
The Threat to the Maritime Domain: How Real Is the Terrorist Threat?	81
<i>Dr. Rohan Gunaratna, Head, International Centre for Political Violence and Terrorism Research, Nanyang Technological University, Singapore, and Senior Fellow, Jebson Center for Counter-Terrorism Studies, Fletcher School of Law and Diplomacy</i>	
WMD Proliferation: The Nexus between State, Nonstate, and Antistate Actors.	91
<i>Dr. Mohan Malik, Professor, Asia-Pacific Center for Security Studies</i>	
Irregular Warfare, Armed Groups, and the Long War: A New Analytical Framework	103
<i>Andrea J. Dew, Research Fellow, Belfer Center for Science and International Affairs, Kennedy School of Government, Harvard University</i>	
Panel IV Summary of Discussion	109
<i>Moderator: Professor Jeffrey H. Norwitz, John Nicholas Brown Academic Chair of Counterterrorism and Professor of National Security Decision Making, U.S. Naval War College</i>	
Panel V: International Cooperation in Securing the Maritime Commons.	111
Legal Interoperability Issues in International Cooperation Measures to Secure the Maritime Commons.	113
<i>Professor Craig H. Allen, Charles H. Stockton Professor of International Law, U.S. Naval War College</i>	
Addendum: International Cooperation in Securing the Maritime Commons.	119
<i>Professor Craig H. Allen, Charles H. Stockton Professor of International Law, U.S. Naval War College</i>	
International Cooperation in Securing the Maritime Commons	127
<i>Vice Admiral Lutz Feldt, German Navy (Retired)</i>	

Panel V Summary of Discussion 131
 *Moderator: Dr. Thomas R. Fedyszyn, Security, Strategy, and Forces
 Course Director, National Security Decision Making Department, U.S.
 Naval War College*

Working Discussion: Findings and Recommendations for Maritime Strategy. . . 133
 *Moderator: Ambassador Paul D. Taylor, Senior Strategic Researcher,
 Strategic Research Department, U.S. Naval War College*

Concluding Discussion: Findings and Recommendations
for Maritime Strategy 139
 *Moderator: Dr. Richmond M. Lloyd, William B. Ruger Chair of National
 Security Economics, U.S. Naval War College*

Concluding Remarks. 143
 *Dr. Richmond M. Lloyd, William B. Ruger Chair of National Security
 Economics, U.S. Naval War College*

Participant Biographies 145

Introduction

Workshop Focus

The purpose of this workshop is to provide a collegial forum for a small and select group of national security specialists to explore the role of a maritime strategy in furthering the twin goals of economic prosperity and security.

Workshop Background

Globalization can be viewed as the flow of goods, services, funds, people, technology, and information across borders. In the twenty-first century it is characterized by increasing volume and speed. Economic productivity and prosperity have been enhanced by the free flows of goods, services, monies, ideas, and talents with world trade expanding and world GDP growing over the last several decades. A major portion of these flows occurs on the global maritime commons.

The National Security Strategy of the United States calls for igniting a new era of global economic growth through free markets and free trade. It seeks to expand the circle of development by opening societies and building the infrastructure of democracy. And it seeks agendas for cooperative action with other main centers of global power.

Unfortunately, there is a dark side to globalization, which comes from the vulnerabilities of the international system. Terrorism, proliferation and potential use of weapons of mass destruction, transnational criminal activities, and forced migration are significant threats to global security. The global maritime commons provides the highways for these security threats.

Thus, the National Security Strategy focuses on defeating global terrorism, preventing attacks against the United States and friends, defusing regional conflicts, and preventing access to and the use of weapons of mass destruction. Besides engaging the opportunities of globalization it is necessary to confront the challenges of globalization.

This workshop explores the important relationships between economics and security, with emphasis on a maritime strategy. Its purpose is to contribute to the development of a maritime strategy in support of the overarching grand strategy of the United States. The workshop is organized using the above construct.

Workshop Venue and Format

A total of 29 participants attended this, by invitation only, workshop held at the Naval War College in Newport Rhode Island. The College and its staff provide a professional environment, with full computer and graphic support, to facilitate small group workshops in exploring their specific issues.

Panelists prepared and presented their papers (approximately 1500–2000 words) on topics of their choice within the subject area of their respective panel. Following a brief presentation of each panelist's paper, all participants engaged in extensive discussion of the papers and the focus of the panel. All discussions were conducted under a non-attribution policy.

All papers (some longer versions have been included), summaries of working group discussions (prepared by each panel moderator), and key findings and recommendations are included in this monograph. Workshop findings will inform the development of a maritime strategy currently underway.

This monograph is available to the general public at <http://www.nwc.navy.mil/nsdm/Rugerpapers.htm>

William B. Ruger Chair of National Security Economics

The Ruger Chair was established to support research and study on the interrelationships between economics and security. A fundamental premise is that without security it is difficult to have economic prosperity and without prosperity it is difficult to have security.

The intent of this Ruger Chair-sponsored workshop is to support individual research, publication, and a continuing dialogue on matters important to national security economics. It is hoped that research done for this workshop will provide participants with the building blocks for further research and publication.

Developing a New Maritime Strategy

The Navy is setting out a series of strategic plans to guide its way ahead in the 21st Century. The Maritime Strategy is one element of a larger four-part structure that includes:

Vision sets the ends. The Navy's vision is *Sea Power 21*.

Strategy is the ways and means to achieve the ends set forth in the vision. The new *Maritime Strategy* will fill this role.

Tactics, as addressed in the *Naval Operations Concept*, comprise the way resources are used and applied by the warfighter.

Resources are finite, and the *Navy Strategic Plan* will inform and guide programmers in the development of the budget submission.

- The process for creating a new maritime strategy isn't about updating an existing document . . . it focuses on a new strategy to address current challenges and to guide the Navy in an entirely new, globally-connected environment that has not existed in the past.
- It will build on the *vision* outlined in *Sea Power 21*, account for the ability to shape the environment, and provide the structure and guidance needed for fleet operational concepts in homeland defense, the War on Terror, irregular warfare and conventional campaigns.
- The Maritime Strategy will connect with published guidance and will serve as the overarching guidance, complementing the vision of *Sea Power 21* and its tenets of Sea Strike, Sea Shield and Sea Basing, which define Navy capabilities.
- To develop the strategy we are seeking a competition of ideas, beginning with a series of forums focused on internal and external audiences to accurately define our environment. We encourage dissenting views and will build a document considering the input of all. The development process will pass through five phases.
 - Phase I: *Collect Inputs and Analyze Strategic Environment*. This begins the process and continues through all phases.
 - Phase II: *Develop Maritime Strategies*. Discuss strategic theories in public forums in order to socialize initial concepts.
 - Phase III: *Test, Examine and Refine Alternatives*. The Navy will legitimize and validate proposed strategies through the testing and gaming process and analysis of results.
 - Phase IV: *Synthesize and Report*. The Navy will synthesize successful strategies into one comprehensive strategy.
 - Phase V: *Sustainment*. The Navy will continue to promote and uphold principles of the Maritime Strategy, ensuring its enduring value and legitimacy.

Using a linear and collaborative approach, input will be sought from individuals and organizations such as OSD, the Joint Staff, Combatant and Component Commanders, USMC, USCG, business and academia, the Interagency, and our friends around the world.

We see a new maritime strategy influencing the next cycle of strategic thinking, including the next Navy Strategic Plan and into the next Quadrennial Defense Review (QDR).

These are dynamic times. The maritime security environment is constantly changing. And our strategies and strategic documents must change with them as necessary to remain relevant. It is a continuous cycle.

“Where the old Maritime Strategy focused on sea control, the new one must recognize that the economic tide of all nations rises—not when the seas are controlled by one—but rather when they are made safe and free for all.”

—Admiral Michael Mullen, Chief of Naval Operations
(Current Strategy Forum, Naval War College, 14 June 2006)

Agenda

Economics and Maritime Strategy: Implications for the 21st Century

A Workshop Sponsored by the
William B. Ruger Chair of National Security Economics
Naval War College, Newport, Rhode Island
6–8 November 2006

Monday, 6 November 2006

1840 Depart Hotel

1900 Welcome Dinner, President's Quarters AA

Tuesday, 7 November 2006

0740 Depart Hotel

0800 Welcome Continental Breakfast, Decision Support Center

0840 Opening Remarks

Rear Admiral Jacob L. Shuford, USN, President, U.S. Naval War College

0845 Panel I: Maritime Strategy in a Globalizing World

Dr. Barry R. Posen, Ford International Professor of Political Science, Massachusetts Institute of Technology

Dr. Geoffrey Till, Professor of Maritime Studies, Defence Studies Department, King's College London

Dr. Timothy D. Hoyt, Professor of Strategy and Policy, U.S. Naval War College

Moderator: Dr. John H. Maurer, Chairman, Strategy and Policy Department, U.S. Naval War College

1015 Break

1030 Panel II: Economic Prosperity and Maritime Strategy

Dr. Richard N. Cooper, Maurits C. Boas Professor of International Economics, Harvard University

Dr. Ellen L. Frost, Visiting Fellow, Institute for International Economics, and Adjunct Research Fellow, Institute of National Strategic Studies, National Defense University

Moderator: Dr. Peter Dombrowski, Chairman, Strategic Research Department, U.S. Naval War College

1200 Lunch, RADM Joseph Strasser Dining Room

1330 Panel III: Economics and Emerging Maritime Powers

Dr. Stephen Philip Cohen, Senior Fellow, Foreign Policy Studies Program, Brookings Institution

Mr. Robert O. Work, Senior Defense Analyst, Center for Strategic and Budgetary Assessments

Dr. Leif R. Rosenberger, Economic Adviser, U.S. Pacific Command

Moderator: Dr. Mackubin Thomas Owens, Associate Dean of Academics for Electives and Directed Research and Professor of National Security Decision Making, U.S. Naval War College

1500 Break

1515 Panel IV: Terrorism, Proliferation, Transnational Crime, and Migration

Dr. Rohan Gunaratna, Head, International Centre for Political Violence and Terrorism Research, Nanyang Technological University, Singapore, and Senior Fellow, Jebson Center for Counter-Terrorism Studies, Fletcher School of Law and Diplomacy

Dr. Mohan Malik, Professor, Asia-Pacific Center for Security Studies

Ms. Andrea J. Dew, Research Fellow, Belfer Center for Science and International Affairs, Kennedy School of Government, Harvard University

Moderator: Professor Jeffrey H. Norwitz, John Nicholas Brown Academic Chair of Counterterrorism and Professor of National Security Decision Making, U.S. Naval War College

1645 Adjourn

1650 Return to Hotel

1845 Depart Hotel

1900 Dinner

Wednesday, 8 November 2006

0740 Depart Hotel

0800 Continental Breakfast, Decision Support Center

0845 Panel V: International Cooperation in Securing the Maritime Commons

Professor Craig H. Allen, Charles H. Stockton Professor of International Law, U.S. Naval War College

Vice Admiral Lutz Feldt, German Navy (Retired)

Moderator: Dr. Thomas R. Fedyszyn, *Security, Strategy, and Forces Course Director, National Security Decision Making Department, U.S. Naval War College*

1015 Break

1030 Working Discussion: Findings and Recommendations for Maritime Strategy

Moderator: Ambassador Paul D. Taylor, *Senior Strategic Researcher, Strategic Research Department, U.S. Naval War College*

1200 Lunch

1315 Concluding Discussion: Findings and Recommendations for Maritime Strategy

Moderator: Dr. Richmond M. Lloyd, *William B. Ruger Chair of National Security Economics, U.S. Naval War College*

1445 Concluding Remarks

Moderator: Dr. Richmond M. Lloyd, *William B. Ruger Chair of National Security Economics, U.S. Naval War College*

1500 Adjourn

1515 Depart to Airport

Participants:

Rear Admiral Michael McDevitt, USN (Retired), *Director, Center for Strategic Studies, Center for Naval Analyses*

Rear Admiral (LH) Philip Hart Cullom, USN, *Director for Strategy and Policy, OPNAV*

Dr. Eric V. Thompson, *Director of the International Affairs Group at the Center for Naval Analyses*

CDR Paul J. Tortora, USN, *OPNAV N3/5 Strategic Action Group*

LtCol Kelly P. Houlgate, USMC, *Strategic Analyst, Strategic Initiatives Group, Headquarters Marine Corps*

Professor Don Marrin, *Assistant Research Professor, War Gaming Department, U.S. Naval War College*

Dr. Derek S. Reveron, *Associate Professor of National Security Decision Making, U.S. Naval War College*

CDR Alan L. Boyer, USN, *Workshop Administrative Assistant, Military Professor, National Security Decision Making Department, U.S. Naval War College*

Opening Remarks

Rear Admiral Jacob L. Shuford, USN President, Naval War College



This workshop, sponsored by Professor Rich Lloyd, the Naval War College's William B. Ruger Chair of National Security Economics, is a key element of a broader undertaking to craft a new maritime strategy for the United States of America. The focus of this workshop is a consideration of the implications of economics and maritime strategy in the globalized environment of the twenty-first century. This is truly important work, because, in an era of globalization driven by our ability to exchange information instantaneously with every corner of the globe and our ability to travel by air in a matter of hours to every capital city on the planet, we would do well to remember that virtually all of the raw and finished goods propelling the global economy moves by sea. So, too, the sea can be misused and undermine the stability of global markets, provid-

ing state and nonstate actors a medium to transport weapons of mass destruction and their means of delivery; giving terrorists and modern-day pirates an avenue of attack; or aiding regimes engaged in forced migration. Clearly, if we take the global maritime commons for granted, we risk imperiling both global economic prosperity and international security.

To aid in developing a new maritime strategy, a strategy that will both inform and support the emerging grand strategy of the United States, this workshop brings together people of extraordinary talent and value to our effort. This is an intellectual effort, requiring diverse expertise in the economic, political, and military disciplines. The extraordinary range and depth of perspective, authority, and intellect of the participants in this workshop will serve the Navy and the nation well as we move downrange to articulate and clarify America's maritime strategic options for the twenty-first century.

It is worth noting how well this workshop fits within the overall effort to develop a new maritime strategy. In the CNO's [Chief of Naval Operations] speech at the Current Strategy Forum held last June at the Naval War College, he highlighted how the effects of globalization drive the need for a new strategy.

- Expansion of interdependent world markets
- The friction created in those market-based economies by "*the race for energy*."
- Global instant access to ideas and ideologies.

"Let's be frank," the CNO said: "The reason we do not have such a new maritime strategy already is that the scope and the scale of threat—the complexity of this globalized era, and this staggering pace of change seem almost impossible to plan for." In the same speech, the CNO made clear that this strategy must be "far above anything Mahan could have envisioned in his day." Such an effort is indeed at the level of what Sir Julian Stafford Corbett defined as "grand strategy."

The stakeholders in this broader effort are many. The Coast Guard and the Marine Corps are fully integrated (after all, we are talking about a "maritime" strategy), and we have participation across many governmental agencies, the commercial sector, and the other services. We also

have developed an extensive agenda with our international naval partner nations to make sure that there is comprehensive opportunity for them to participate.

The guidance we have from the CNO is that our process be open, inclusive, auditable, and designed to enable a competition of ideas. We have avoided establishing precepts that might artificially constrain debate. Yet some most certainly emerge as lynchpin strategic notions to be considered. One, for example, may be found in this quote from the CNO's recent interview in *Sea Power Magazine*: "*Where our previous maritime strategy was designed just to defeat a single enemy at sea, our new one must be centered upon building partnerships across the world.*"

No one disputes that we are a maritime nation. It follows that a maritime perspective is fundamental to any grand strategy for the United States. And when we consider the fact that grand strategy is defined by the art of maximizing the influence of a nation—or groups of nations—to support policy objectives in war or peace, the special character and traditions of maritime forces present themselves as particularly relevant to an era of globalization.

At the end of this workshop, I have no doubt that we will be a lot more confident about just where, why, and how maritime forces of this nation can matter most in advancing economic prosperity and security.

Panel I

Maritime Strategy in a Globalizing World



Dr. Barry R. Posen

Ford International Professor of Political Science, Massachusetts Institute of Technology

Dr. Geoffrey Till

Professor of Maritime Studies, Defence Studies Department, King's College London

Dr. Timothy D. Hoyt

Professor of Strategy and Policy, U.S. Naval War College

Moderator:

Dr. John H. Maurer

Chairman, Strategy and Policy Department, U.S. Naval War College

Stability and Change in U.S. Grand Strategy

Dr. Barry R. Posen

**Ford International Professor of Political Science
Massachusetts Institute of Technology**

Since the emergence of the Global War on Terror, now termed the Long War, as the centerpiece of U.S. grand strategy in 2001, the post–Cold War U.S. grand strategy debate has narrowed significantly. Essentially three alternative strategies now compete for pride of place. Two are variants of a “primacy” strategy. One is a variant of “restraint,” sometimes termed “off-shore balancing.”¹ All three strategies take globalization as a given and as a positive development. None specifically connects U.S. military power to globalization. To the extent that globalization can be argued to have negative consequences, restraint offers a different remedy than does either version of primacy.

Below, I offer a brief characterization of globalization and speculate on its positive and negative results. I then discuss the three grand strategies that remain visible in the U.S. public policy debate, and their suggested remedies. I also discuss the military strengths and weaknesses of the United States to gauge which strategy’s remedies are most feasible.

For purposes of this discussion, globalization is the umbrella term that captures the current worldwide extent of capitalism and the material facts that have enabled this extension. Today we see voluminous international trade and investment, as well as extensive global supply chains. This is enabled by redundant, reliable, high-capacity, and inexpensive global transportation networks—mainly sea transport, but also air and land. It is also enabled by capacious, real-time, global means of communication.

The positive results of globalization are clear. Labor, capital, and talent have been mobilized on a massive scale. An intense international division of labor has permitted very great efficiencies and high productivity. This has made for high growth in many countries, and remarkably high growth in a few.

It is arguable that globalization has also produced some negative results. In particular, it has made for tremendous disruption of traditional societies.² The general improvement in the welfare of people the world over has permitted a massive population explosion, which has not yet subsided. Many of these people are moving into large urban areas. Wealth is unevenly distributed in most of these societies, so cities fill up with the poor and the insecure. Millions of people are thus “socially mobilized” for participation in politics. They demand security and good governance, but existing state structures are often overwhelmed. Thus millions of people are vulnerable to appeals by extremists of every type. The most common type of appeal mixes traditional nationalist and religious themes and harks back to a better past.

As globalization creates new political demands, the international transportation and communication linkages that facilitate international trade and investment also offer opportunities for

-
1. Barry R. Posen and Andrew L. Ross, “Competing Visions of U.S. Grand Strategy,” *International Security* 21, no. 3 (Winter 1996/97), pp. 5–53, summarizes the immediate post–Cold War grand strategy debate in the United States. In that article the term “neo-isolationism” was used instead of “restraint.” More recently the term “off-shore balancing” has come into use.
 2. Jonathan Kirshner, “Globalization, Power, and Prospect,” Chapter 11, pp. 321–338, in Johnathan Kirshner, ed., *Globalization and National Security* (New York: Routledge, 2006), argues that globalization has these disruptive effects. See also Michael Mousseau, “Market Civilization and Its Clash with Terror,” *International Security*.

organized “antisystem” groups to move people and resources around the globe. These may be employed to organize domestic opposition to particular governments, such as the Tamil Tigers are. Globalization also provides opportunities for transnational antisystem parties such as al-Qa’ida.

The Global Distribution of Military Power

Any grand strategy must address the global distribution of military power. Typically this is measured in terms of gross domestic product, defense spending, military manpower, and major items of military equipment. By most measures, the United States is far and away the greatest military power in the system and arguably has the longest global reach of any power in history. This situation, a result of the collapse of the Soviet Union, quickly came to be seen as natural by many in the U.S. political elite, so much so that reflection on the remaining limits to U.S. military power was rarely seen.

A qualitative assessment of U.S. military power relative to others is also necessary. Broadly speaking, the United States enjoys what I have called “command of the commons.”³ The United States commands the sea, the air at altitudes above 10,000 feet, and space. If it wishes, it can drive others from these media. There is little that others can do about it. Competition in this realm depends on areas of great U.S. superiority—military research and development, extensive economic resources, highly skilled military professionals. It is plausible that U.S. command of the commons has been an important enabler of globalization. That said, the military advantages of the United States and other western powers diminish in the “contested zones”—the littorals; the skies below 10,000 feet, where cheap anti-aircraft weapons are effective; and on land—wherever the use of infantry is more appropriate than the use of armored vehicles. Though the United States certainly can fight effectively in these zones, the fights are likely to be more demanding, and many more nation-states are likely to be capable of tilting with U.S. forces. The contested zones remain contested because in these areas quantities of motivated soldiers matter; background noise reduces the effectiveness of U.S. intelligence-gathering technologies; and the weapons necessary to do damage are cheap and plentiful.

The Two Variants of Primacy

Both mainstream Republican strategic thinkers and mainstream Democratic strategic thinkers have learned to love the preeminent material power position that the collapse of the Soviet Union bequeathed to the United States: primacy has captured the hearts of both parties. For this discussion I will term the strategy of the current Bush administration “national liberalism” and the former Clinton administration “liberal internationalism.” Both agree that the United States faces no peer competitor and that it is difficult, for a host of reasons, for the other consequential powers to coordinate a coalition to truly “balance” American power, especially American military power. Both strategies are committed to maintaining this preeminent power position for as long as possible, though neither Democrats nor Republicans have yet tested the willingness of the American people to pay significant costs to do so.

Both strategies are predisposed to use U.S. power for a variety of positive purposes abroad. Of particular interest to both parties are failed or failing states or particularly illiberal states, with meaningful military capabilities, in particularly sensitive geostrategic regions (often called “rogues.”) To the extent that globalization is partly responsible for these problems, both the “national liberals” and the “liberal internationalists” still seem inclined to deal with these problems in the places they emerge. Democrats came to these beliefs in the 1990s, while most

3. Barry R. Posen, “Command of the Commons: The Military Foundation of U.S. Hegemony,” *International Security* 28, no. 1 (Summer 2003), pp. 5–46.

Republicans then demurred.⁴ Since the attacks of September 11, 2001, and the fact that the perpetrators had profited from al-Qa'ida's cozy relationship with the Taliban regime in Afghanistan, Bush administration strategists have come to share the view that these kinds of threats are important.⁵ So-called neoconservatives within the Republican Party were the strongest advocates of this view.

Both schools of primacy believe that weak, failing, or rogue states are hatcheries of terrorism, fanaticism, bloodshed, crime, and weapons of mass destruction. These problems in one place are expected to spread to other places. Containment is not an option; failed states or illiberal militant ones, should, if at all possible, be turned into successful democratic states through U.S. advice, cajoling, pressure, and occasionally direct intervention.

The main thing that "national liberals" and "liberal internationalists" disagree about in international politics relates to legitimacy. What is legitimacy worth relative to capability? Where does legitimacy come from? For purposes of this discussion, legitimacy means that an action taken by the United States, alone or with its allies, is acceptable to others, regardless of whether they agree with all or even most of the specific reasons for the action. Liberal internationalists believe that legitimacy is worth quite a lot in international politics, and that loss of legitimacy is the same as the loss of material power. Liberal internationalists believe that legitimacy derives from liberal processes in international politics, which means that key U.S. actions, especially large ones, emerge from a process of give and take within distinctly international institutions. The United States typically will have more power than others within these institutions and can usually drive decisions in the direction it wants, if it is a bit clever, a bit patient, and a bit willing to compromise. These small costs are expected to produce large dividends in political support, or at least toleration.

National liberals believe that legitimacy matters less than material power. U.S. interests should not be amended, and U.S. actions should not be delayed for the purpose of generating legitimacy. Legitimacy is nice to have, but not necessary. In any case, national liberals see legitimacy as arising from American distinctiveness. The United States is seen as the key liberal democratic power. Other states are simply expected to understand this. U.S. actions in international politics enjoy inherent legitimacy. In any case, U.S. actions are intended to produce more liberal democratic states, and this too makes the action more legitimate. Legitimacy matters less to the current crop of Republican strategists than it does to Democratic strategists, and liberal international institutions are not seen as key contributors to legitimacy in any case.

For any future U.S. naval strategy, the similarities across the two parties matter more than the differences. The likely trajectory for U.S. grand strategy is more of the same, with some caution introduced by the Iraq experience. Both versions of primacy need command of the commons, including command of the sea, to preserve the United States as the predominant global power—this allows the United States to keep the power of other states divided. Both versions of primacy need command of the sea in order to go where they wish to go to affect failed states or problem states, and that could be anywhere. Both versions of primacy will remain committed, at least in theory, to regime change, which means an enduring requirement for "forcible entry" capability. Finally, both strategies need the Navy to have the ability to serve as the focus of a

4. See the final strategy document of the Clinton administration, "A National Security Strategy for a Global Age," The White House, December 2000. Among other things, the document is noteworthy for its frequent references to globalization. Echoing many of these themes is G. John Ikenberry and Anne-Marie Slaughter, codirectors, "Forging a World of Liberty Under Law: U.S. National Security in the 21st Century," Final Paper of the Princeton Project on National Security, Woodrow Wilson School of Public and International Affairs, Princeton University, September 27, 2006.

5. "The National Security Strategy of the United State of America," The White House, March 2006; and the "Quadrennial Defense Review Report," U.S. Dept. of Defense, February 6, 2006.

large coalition. Republican Party strategists have nothing against military cooperation with other states in a traditional alliance mode—the United States leads and others follow. They value alliances as traditional tools of power.

To the extent that both versions of primacy retain their interest in the internal makeup of other states, both will need to confront the “contested zones.” Iraq ought to have taught a lesson about how difficult these areas can be for the United States. It is too early to tell, however, whether or not this experience will cause a revision of the inclination inherent in both primacy strategies for direct military intervention on land to organize failing or failed states, or to reorganize rogue states.

Democratic party strategists, with their interest in institutions and legitimacy, may be willing to pay some costs in military efficiency to ensure that others participate in agreed military actions. They may need a military that is a bit more capable of “waiting” for international institutions to sort out decisions, and a bit more capable of integrating disparate, perhaps even ineffectual, national militaries into a multinational effort in order to ensure legitimacy going into an action. The former may put a somewhat higher premium on the ability to enforce sanctions, embargoes, and blockades, and the latter a bit more of a premium on “plug and play” command and control, as well as diverse understanding of other navies and other cultures.

Restraint

Advocates of “restraint” differ significantly from the mainstream views in the two parties.⁶ Many of these people are academics, realist theorists of international politics. Politically they run the gamut from Republicans, to Democrats, to Libertarians. They are the intellectual heirs of the British Empire’s “offshore balancing” strategy. Advocates of restraint tend to believe that the United States is quite secure, due to its great power, its weak and agreeable neighbors, and its vast distance from most of the trouble in the world, distances patrolled by the U.S. Navy. They see the risk of a global anti-U.S. coalition as small. They see an enduring U.S. interest in ensuring that no great Eurasian superstate emerges through conquest that could rival U.S. power. And they would argue that the United States should, through its own internal efforts, match as far as possible the internal efforts that others make to grow their own power. If this proves impossible, offshore balancers would join with other powers affected by such growth to form a balancing coalition.

These thinkers do not share the view that failed states, or illiberal states with some military power, constitute great threats to the United States, threats that need to be dealt with proactively. To the extent that globalization plays a role in fostering domestic and international radical movements, these strategists are loath to intervene directly in the internal politics of other states to manage these problems. These strategists understand why and how the contested zone is a major enduring military problem for the United States. Rather, they would leverage U.S. command of the sea, air, and space to limit the freedom of movement of troublesome actors. They acknowledge that terrorism is a problem, but the first rule should be to do no harm. They accept that “national-ism” is at least as powerful as “liberal-ism.” Liberal practices and institutions may have universal appeal, but each culture must find its own way to these practices. The surest way for the United States to slow this development is to attach a “Made in the U.S.” label on it, which energizes nationalist resistance. Restraint advocates do not want the United States to confront local nationalisms, if this can be avoided.

6. Eugene Gholz, Daryl G. Press, and Harvey M. Sapolsky, “Come Home America: The Strategy of Restraint in the Face of Temptation,” *International Security* 21, no. 4 (Spring 1997), pp. 5–48, offers the clearest statement of this grand strategy, and the most systematic argument supporting it.

The main military capability that advocates of restraint wish to protect is the ability to use the sea lanes to assist allies, in order to protect regional balances of power. On this matter they have no essential disagreement with primacists of either stripe. These strategists believe that strong states are frightened of their immediate strong neighbors, so there is a tendency for regional power balances to form. If they need a little push, the United States should have the capability to provide that push. Countries striving to balance powerful neighbors and desirous of U.S. help will have a strong interest in protecting their own waters and their own ports. Thus, from the point of view of traditional security concerns, the U.S. Navy would concentrate on the open oceans. Given the state of technology, this means the defense of civilian and military transport shipping against submarine threats and against long-range aviation armed with antiship missiles.

U.S. naval power is a key enabler of either primacy strategy that the United States could choose, and given the trends in U.S. politics, the capabilities on hand will likely prove as attractive to the next administration as they are to the present one. The trouble in Iraq has put the primacy strategies under an unflattering light, but there is still little evidence that elites have learned much. Continuity is more likely. We can, however, see the likely direction of U.S. grand strategy in the event of higher costs in Iraq, or reverses elsewhere. A strategy of restraint will include many familiar roles for the Navy. That said, presuming that future administrations maintain a positive view of globalization, then the Navy will also find itself having to deal with some of its negative consequences. Globalization is socially disruptive and makes enemies for the United States. These enemies can take advantage of the relative improvement in the ease of moving people and materiel around the world to do real, if limited, harm to the societies of democratic countries. The Navy may find a second mission in watching over the peacetime sea lines of communication to reduce the prospects for those who would use them to do harm to us and to our friends.

Maritime Strategy in a Gobalising World

Dr. Geoffrey Till
 Professor of Maritime Studies
 Defence Studies Department, King's College London

Today, two competing models of naval development reflect both the national security perspectives of states and the current state of globalisation. The biggest issue confronting national leaders when contemplating naval policy is, therefore, first to work out their attitudes to globalisation.¹

Model 1: National Navies

The first model of naval development reflects the Westphalian state system, with its assumptions of unending competition between states for power influence, land and resources, ideological supremacy and its preoccupations with military power. Basically naval development conforms to the notion that international politics is about who gets what, when, and how—and that the provision of security is the fundamental justification for the state.

The characteristics of the national approach include an assumption that seapower is about bringing influence to bear on the behaviour of *other states*. The preoccupation is therefore peer competition—when navies take each other as providing the benchmark for naval development. Naval development in one country is based upon, and possibly aimed against, the naval development of others. It is a case of like against like and broadly symmetrical conflict.

The main indicator of this is the search for *decisive battle*. Mahan, perhaps unfairly regarded as the apostle of this approach for Mahan's Creed, which emphasised the importance and the military character of seapower, was widely accepted and dominated naval development through the twentieth century, given its preoccupations with the first and second world wars and the cold war.

But perhaps it's a new world now, calling for a new model of naval development—dominated by a new style of *Globalisation*, driven not simply by states in their pursuit of the capacity to trade with advantage, but more by companies in search of free markets and individuals insistent on free information and open access and now technologically empowered to get it. Globalisation—the argument goes—is based on an expectation of mutual, though not necessarily equal, benefit to all, and on a set of liberal but universal trading values. These values have resulted in the development of a world society which reduces the capacity of states for independent action and is thoroughly sea-based.

This is a world which picks out continents, trade routes and capital flows but ignores nations. It depends on sea-based trade and is expected to double or treble over the next 20 years.

But the system, however sophisticated, has always been vulnerable, especially now, with the 'just enough just in time' philosophy. Modern industries plot the passage of containers in quarters of an hour.

1. On this issue, Sam J. Tangredi [Ed.], *Globalization and Maritime Power* (Washington: National Defense University Press, 2002) and John Baylis and Steve Smith [Eds.], *The Globalization of World Politics* (Oxford: Oxford University Press, 2001) are both good places to start.

9/11 suggests that today's threats are especially serious because of the emergence of new types of threat. The target was uniquely significant—the World Trade Towers. These people aren't about arguing for a bigger slice of the cake; they want to destroy the bakery—the system, in other words. They are, however, half-supported by masses of people who *do* want a bigger slice of the cake, and who might be detached from this level of support by the development of a more equitable trading system. Hence the need for significant ideological, social and economic strands to the defence of the system.

Deliberate attack of, and lack of support for, the system are but two of the threats facing this sea-based trading system. Others include maritime crime, resource degradation, environmental deterioration and inadvertent damage caused by conflicts ashore.²

An important element in all this is the unpredictability of future events. *Iran 1979* is a good example of combinations of events which weren't expected and perhaps could not have been predicted. The Iranian revolution did not make sense in conventional Western terms.

In the mid-1970s Iran was oil-rich, with more doctors per head of the population, more hospitals, more tarmac roads, better water supplies than anywhere else in the Middle East, and yet it was here that there was a mediaeval backlash in the form of the regime of the ayatollahs. These were people who just do not sign up to the values of a world system that was producing all these apparent benefits. Naval planners therefore have to cope with the possibility of strategic surprise.

This range of known and unknown threats requires navies, and the need to act together in common defence of the common benefits of the global system. Hence the emergence of the second model of naval development:

Model 2: Collaborative Navies

With his talk of a community of interests and righteous ideals, Mahan has gone before us.³

Navies of this sort have an internationalist, a collaborative, almost collective world outlook. They see their role as defending the system, directly at sea and indirectly from the sea. Their capacity to do so depends on four necessary naval capacities or roles.

1: Maintaining Sea Control

Now the focus in sea control is on the littoral rather than the open oceans. The U.S. Navy is now the biggest coastal navy in the world—only it operates on other peoples' coasts. Here it, and its allies, face a different kind of asymmetric threat and respond accordingly in sizing and shaping their fleets.⁴

Sea control now requires a focus on force protection and 'battlespace dominance' in the littoral, where conditions are different than on open ocean and land-based threats are more apparent. For many navies, this is a major shift in emphasis from the old perspectives of the Cold War.

2. These are detailed in my *Seapower: A Guide for the 21st Century* (London: Frank Cass, 2004), pp. 310–378. In many ways this article is a development of the last chapter of that book.

3. Alfred Thayer Mahan, *Retrospect and Prospect* (London: Sampson, Low, Marston, 1902), pp. 177–178.

4. The emergence of the Littoral Combat Ship in response to such events as the attack on the *USS Cole* illustrates something of a global trend.

2: Maritime Security: Maintaining Good Order at Sea

Good order is threatened by everything from international crime, to direct attack and environmental crisis.⁵

Good order at sea has to involve increasing awareness of the importance of the issue, the creation of a motivating overall policy at all levels and its execution by navies and other maritime agencies. While its immediate focus may be on the 'home game', globalisation means there is an important 'away game' to win as well. For navies of the collaborative sort, Maritime Security⁶ operations call for naval forces capable of constabulary and low-intensity operations. They'll need to cooperate fully with each other and with coastguards for this.

There are differing ways of doing this, reflecting different geographical situations, levels of threat, constitutional approach, history, etc., and no single right answer. But one common feature is the fact that this has to be a maritime, rather than a strictly 'naval', approach. But most approaches will usually involve naval capacities to some degree. Even high-intensity capacities are of value for good order tasks, though rarely designed for them. This development may represent a challenge to naval traditions, even possibly to the law of the sea.

3: Maritime Power Projection

Corbett provides the United States with a useful reminder that mankind's destiny will ultimately be decided ashore. Indeed, the *land* is the source of most maritime disorder. The security problems in the waters around Indonesia, for example, are largely a problem of the lack of governance ashore. At sea, therefore, navies are usually dealing with the symptoms of the problem, not its causes.

Because maritime power projection is about helping deal with the causes, navies are at their most important for their effect on land. Here they are defending the system indirectly by what they do *from* the sea rather than *at* sea.

Because it is the area where most people live, most industries can be found and through which most trade is conducted, the littoral is where the threats are located and so becomes the natural arena for maritime power projection.

Clearly, 'moving sea and air forces to deliver fire is not enough to win the global war on terrorism, much less more conventional wars. As the only armed force with the staying power and the strength to clear and occupy key points on the ground, the army alone can impose lasting political and cultural change.'⁷ Accordingly, navies have the key role at the strategic, operational and tactical levels of enabling this to happen though their contribution to joint and combined expeditionary task forces.

The naval contribution rests on the capacity to manoeuvre from the sea and includes the transportation of forces, their supply and sustainment, their support with different kinds of offensive airpower and their protection against all forms of air attack. This includes a major emphasis on the advantages of sea-basing, a phenomenon as evident in Europe as it is in the United States.⁸

5. Till, op. cit., pp. 310–350.

6. The appearance of the concept of Maritime Security (with capital letters) around the world in the last couple of years is noteworthy.

7. Donald A. Macgregor, *Transformation Under Fire: Revolutionizing How America Fights* (London: Praeger, 2003), p. 55.

8. See my *Naval Transformation, Ground Forces and the Expeditionary Impulse: The Sea Basing Debate* (Carlisle: Strategic Studies Institute, forthcoming) for a discussion of this.

This shift towards the creation of Joint and Combined Expeditionary Task Forces has major implications for naval force development. It requires a shift in U.S. and European navies away from open ocean operations in defence of sea lines of communication (SLOCs).

Drastic changes in the navies of Scandinavia are interesting not just for a radical change of role but also because they exemplify a *contributory* strategy—the acceptance, in other words, of the fact that resource limitations mean that no single nation can solve its security problems on its own, and that a collective maritime effort is required, with all the loss of sovereignty that that implies.

Maritime power projection is about influencing the behaviour of other states and other people. It works in times of peace as well as of conflict. It is a question of deterring adversaries from unwelcome actions and compelling them into welcome ones. In many ways it either sets the preconditions for more kinetic forms of intervention ashore, or hopefully makes it unnecessary. It is, in other words, a major and often forgotten contribution to the resolution of conflicts ashore.

The same can be said for the friendlier aspects of naval diplomacy which are aimed at reassuring allies. This is, accordingly, an increasing part of contemporary maritime strategy.

4: Maintaining the Maritime Consensus

If maritime security as already discussed is the home game, a global maritime consensus is a precondition for the distant water variant—the away game.

Experience in the *Gulf* shows that navies are especially useful for this because their flexibility means they offer governments a means of calibrating and so facilitating their participation.

The ongoing debate about the *Thousand Ship Navy* is now focussing on what it means and how such a maritime consensus might best be delivered. Because the term implies a hierarchical and military-dominated approach, the term itself should probably be sunk and the concept redefined as a global maritime community of major stakeholders in the system who are pledged to defend it against all manner of threats. A sense of naval togetherness is an important precondition for this; sustaining it through mutual cooperation, combined exercises, staff exchanges and port visits therefore becomes increasingly important. Here the *quantity* of assets available for such is likely to be as important as their quality.⁹

But all this assumes that that Globalisation will continue and that there is a strong sense of international community which in the future can be expressed and acted upon in maritime ways.

Has Globalisation a Future?

Globalisation may anyway be systemically frailer than we think and so more vulnerable to the ‘other worlders.’ Some people and some regimes seem to be working to a different set of rules, as though living on another planet.

Less dramatically, some analysts, for example, argue that our comforting optimism about the future of globalisation depends on the assumption of sufficient resources. They go on to say that this is proving an illusion, most obviously in the availability of oil. A steep rise in oil

9. This is a major problem for navies facing resource limitations. The decline in the number of workaday frigates in Europe in favour of fewer more expensive and more capable platforms is a matter of concern.

demand, especially from China, Japan and the rest of the Asia-Pacific, is coinciding with a terminal fall in the discovery of new reserves.¹⁰

Anticipating that they shall soon have to start scraping the bottom of the barrel, states are already manoeuvring so they can cope with a less secure energy future, and even now that is exacerbating relations.

Take China and Japan, for example. They are in dispute over islands which straddle potentially important marine oil fields. They are both competing for stocks in the volatile Middle East. The Chinese are heavily engaged in regimes which the United States regards as dangerous and disreputable (Sudan, Venezuela, Zimbabwe and Iran). The Chinese are moving into the Indian Ocean, watched warily by India.

In all these ways, there are still strong Westphalian tendencies in the way that states behave and their consequent impact on the system. Given the difficulty of predicting future events and reflecting the possibility that globalisation may not march ever onwards, nations, the argument goes, had better prepare for a bleaker, less collegiate, more individual future as well. As Thomas Friedman points out, war could ‘unflatten’ the world.¹¹

Despite the onset of globalisation, states and the national perspective still continue. Indeed, attitudes *towards* globalisation and its maritime requirements may often reflect the kind of ‘national’ perspectives that actually help determine its character and extent, as they arguably did before.¹² These, in turn, will help determine the size, shape and role of the fleet. They suggest that the ‘national’ rather than collaborative model of navies still obtains.

Back to the National Approach?

Nowadays, as before, this more traditional approach is characterised by an emphasis on sea control and peer competition of the Mahanian sort that dominated naval events through the whole of the twentieth century, which call for platforms optimised for high-intensity ‘fleet v fleet’ engagements, as Admiral Gorshkov used to call them. They are expensive, and probably optimised for open ocean operations rather than land attack. Weaponry and sensor mixes emphasise ASW, anti-air, anti-ship missiles, etc.—capacities that until a few weeks ago, we couldn’t expect non-state forces of disorder to possess or use. Defensive mining is another characteristic of this approach.¹³

‘National’ navies also tend to regard the sea as a frontier that needs to be defended individually and exclusively. They have a strong focus on home waters and a marked disinclination to compromise with neighbours. They exhibit lower levels of *effective* compliance with international maritime conventions, and limited involvement in multilateral enforcement arrangements. They have an inherent suspicion of anything that threatens to subvert sovereignty, or to compromise national traditions, cultures and standard operating procedures—the kind of thing, in short, that complicates antipiracy policies in the Strait of Malacca.

10. Jeremy Leggett, ‘Dark Secret: What They Don’t Want You to Know About the Coming Oil Crisis’, *The Independent*, January 20, 2006.

11. Thomas Friedman, *The World Is Flat: The Globalized World in the Twenty-First Century* (London: Penguin, 2006), p. 498. See also Charles Kruathammer’s reference to the ‘natural way of nations’ in ‘But not at the UN’, *Time*, October 23, 2006, p. 33.

12. In Friedman’s Globalisation 1 period, dominant nations sought consciously to encourage the kind of globalisation that would allow them to trade with advantage. Navies at that time were in the business of expanding the system, not just protecting it. Friedman, op. cit., pp. 7–9.

13. Joris Janssen Lok, ‘Back to Mine: Finnish Navy Seeks to Boost Its Underwater Weapons’, *Jane’s International Defence Review*, November 2006, p. 44.

To make this possible, national navies make every effort to maintain independent all-round capabilities in order to guard against the unknown and to maintain options, by constructing a balanced fleet.

The same thinking is seen to justify the defence of a national defence industrial base. This explains the attractions of economic self-reliance which lead countries as varied as Iran and India into the determined development of indigenous industrial capabilities, even though this may make cooperation technologically and politically more difficult.

Conclusion: The Problem of Fleet Balance

These two competing visions of the world's future are crudely drawn, and so are the maritime behaviours and capabilities they call for. But certain caveats need to be entered straight away. First, neither globalisation nor the protective function of naval power is new, though the extent might be. For many centuries, in fact, the patterns of global trade have been driven by market forces which no one can control even if they wanted to. Navies have had this collective system defence role, alongside their 'national' roles, to some degree for several centuries.¹⁴

Nor are such roles, or the capacities they require, mutually exclusive alternatives. Indeed, such naval capacities as amphibious warfare ships and ship-borne helicopters can be as valuable for humanitarian relief operations as for maritime power projection.

Accordingly, most states blend both approaches to some degree. Take the United States, for example. On the one hand they have a recent thoroughly joined-up naval and maritime security policy (at least in theory), and the current CNO is pushing heavily for his collaborative "Thousand Ship Navy." On the other, there's substantial concern about the modernisation of the Chinese navy and about the future situation in the east and South China seas, and so they engage in a unilateral pursuit of U.S.-based technological excellence that may make it difficult for even their closest allies to keep up with them.

The Indians, the Pakistanis, the Japanese, the Koreans exhibit the same mixed approach.

Generally speaking, though, there has been a major shift from the national to the collective. The question is the extent to which the future of globalisation will allow this shift to continue. Addressing this issue, and its maritime implications, is central to the task of designing a navy and crafting a doctrine.

So what do naval force developers and doctrine writers do to cope with a world that, despite our best efforts, remains unpredictable in many of its essentials? How do they approach the problem of balance between contending approaches? How do they make for a fleet that's sufficiently versatile to cope with many of the consequences of our inherent inability to predict? That's what we're here to discuss!

14. Cooperative naval action against the Barbary pirates in the early nineteenth century, the issuance of an international code of signals and the Royal Navy's later campaign against slavery are good examples of this. Certainly the Royal Navy *believed* it was acting in the interests of the whole world in this and other acts of common defence. Not everyone would have agreed with this perception, such as the first nations of Canada's northwest, or China's Ming Dynasty. The attitude is nicely satirised in Sellar and Yeatman, *1066 and All That*, with their reference to 'the important International law called Rule Britannia, technically known as Freedom of the Seas.'

The United States and Maritime Strategy: A Parochial View from Newport

Dr. Timothy D. Hoyt
Professor of Strategy and Policy
U.S. Naval War College

The title of this paper reflects the Naval War College's role in the creation of maritime strategy for the U.S. Navy. Throughout the twentieth century, the Naval War College has contributed to the Navy's efforts to manage threats and plan for conflict, first with Japan ("War Plan Orange") and later with the Soviet Union (the Maritime Strategy). In addressing the dramatically changed environment of the twenty-first century, this paper will take a very parochial view—a U.S.-centric vision of maritime strategy, based on the long tradition of historical and strategic scholarship at the Naval War College.

As we think about the maritime strategy, and particularly its relationship with global economics, it is worth reexamining first principles and historic precedents. Strategy, as taught here at the Naval War College, is the bridge between military operations and policy—the conscious consideration of effectively utilizing military forces (in war and peace, as shall be discussed below) to achieve national objectives. We base our study of strategy on five major theoretical works: Sun Tzu's *The Art of War*, Carl von Clausewitz's *On War*, Alfred Thayer Mahan's *The Influence of Sea Power Upon History*, Sir Julian Corbett's *Some Principles of Maritime Strategy*, and Mao Zedong's *On Protracted War*. Each of these works raises timeless principles that relate to the problem we will wrestle with over the next two days—Economics and Maritime Strategy: Implications for the 21st Century.

The first issue to consider is how narrowly to define the term "strategy." Is it, as some of the classic theorists hold, solely about the use of military force in wartime? Even the master of Western strategic theory, Clausewitz, approaches this issue with some caution. He notes that war consists of two elements—war proper and preparation for war—and specifically and consciously focuses on the former at the expense of the latter. This theoretical construct has contributed to enormous misunderstanding of his work, which tacitly recognizes not only the importance of economics (to provide the sinews and preparation for war) but also the importance of diplomacy. Sun Tzu's *The Art of War*, although largely focused on how to wage war, includes the crucial contribution of how to "win without fighting." Mao also understands the importance of preparing adequately for conflict before engaging in open combat.

Maritime strategy encompasses more than simply the preparation of maritime forces for warfare. This is explicit in Mahan, who lists six critical factors in determining relative sea power. It includes not only naval operations at sea, but also amphibious operations and support for ground forces, including the opening of peripheral theaters, as detailed by Corbett. Hew Strachan raises this issue in a recent (and excellent) article on the varying (and sometimes contradictory) meanings of the word "strategy": "The military historian needs to confront an existential question: why is there strategy on the one hand and naval strategy on the other?"

In the best academic tradition, one way to answer this question is by raising another question. Why do most powers only adopt a partial or mixed maritime strategy? The answer is that most states face immediate threats to their security, either from internal conflict or from neighboring states. Maritime power in the modern era is intimately connected with the economic benefits associated with the sea and maritime trade. Maritime strategies encompass both war and peace, because true maritime powers have major interests in the peacetime economic order.

Commerce and the utilization of oceans is crucial to sustaining the economic basis of both national prosperity and national security. This requires the maritime power to play an active role in responding to a wide range of threats, but handled wisely, a maritime strategy supports both the national interest and the broader collective good.

A true maritime strategy can be exercised only by a power (a) that can defend and expand its access to those economic benefits that contribute to its continued maritime dominance and (b) that lacks a threat from neighboring continental states. This has only been true of a few major states in the modern era—states that are both unique and literally insular. The Netherlands, protected to some extent from invasion by land by the ability to flood large parts of its territory, was a leading maritime power in the sixteenth and seventeenth centuries. Britain, an island, was uniquely positioned to take on this role in the eighteenth and nineteenth centuries. The United States, a continent-sized virtual island—assuming no emerging major threats from Mexico or Canada—shared and later assumed this role in the twentieth century. The United States remains a maritime nation, and its economy and security are intimately connected with the maritime domain. As a result, the United States needs a maritime strategy that is more than simply a good guide to naval operations in wartime.

Geoffrey Till's paper elegantly assesses U.S. maritime strategy as poised between two competing visions—a national tradition based on the Westphalian system of sovereign states, and a collaborative vision based on emerging economic globalization. I will offer a second, but not contradictory, perspective, which focuses on the demands of war and peace. The demands of wartime—in this case, not just the Global War on Terror/Long War, but also including other potential threats to regional and global stability—are concerned primarily with the deployment, threat, or actual use of military forces, operating alone or in coalition. The requirements of peacetime—management of the global economic order—of necessity require a broader and more collaborative approach, including the use of coalitions, international cooperation and agreements, and the negotiation, perhaps, of new legal frameworks for good order at sea. These competing requirements will dominate the debate over resource allocation and strategic choice.

History provides us with some other factors or indicators that may be helpful as we consider the future and the role of maritime power. The first is the changing face of economic geography. Which areas of the world are now most important for global trade? What distinct requirements might this new geographic reality impose on maritime powers, alone or in coalition? Second, given changes in economics and geographic priorities, how have threats to international economic stability and global order changed? Have new threats arisen? Old ones receded in importance? What are the ramifications of these changes for a maritime strategy? Third, given the changes in priority and threats, what are the benefits and challenges of operating in coalition? Are there costs to collaboration, and if so, what might they be?

Maritime strategies always reflect the dominant economic geography of the period. In the sixteenth–eighteenth centuries, the major arenas of maritime competition were the Mediterranean, Atlantic, and Caribbean. The Caribbean's importance in the global economy waned in the nineteenth century, and in the twentieth century the Pacific Ocean became increasingly important. The Indian Ocean and Pacific rim have become the focus of maritime geography in the twenty-first century, reflecting the rise of Asian economies and the importance of energy flows from the Persian Gulf.

As economic geography changes, so do the critical chokepoints through which trade and commerce must pass. Britain's focus on the Western Approaches, the Strait of Gibraltar, and the Baltic passage reflected not only crucial maritime trade routes but also the key areas from which it could contain and dominate its French and Spanish (and possibly Russian) enemies. The Cold War maritime strategy revolved around the Kola peninsula, the Greenland-Iceland-UK

gap, and the eastern Mediterranean. Today, the major chokepoints have shifted east—the Strait of Hormuz, the Straits of Malacca, and (perhaps) the Taiwan Strait are of critical interest to maritime trade and security.

Geography also provides the means to contain regional maritime powers and potential global competitors. Even the most powerful maritime states prefer to be able to control the seas for their own use, and deny them as much as possible to prospective adversaries. When the struggle for sea control takes place on the oceans rather than the littorals, it demonstrates that the dominant maritime powers have lost at least some of their ability to contain their opponents. From the 1750s until the end of the Napoleonic period, a powerful fleet in the Western approaches not only ensured British channel shipping but also effectively contained the French Atlantic squadron and protected Britain from invasion. In the early 1900s, British focus shifted to containing the German High Seas Fleet in the North Sea—a mission that was largely successful. During the Second World War, however, Britain was forced to win the Battle of the Atlantic far from British shores, and Britain's possessions in the Mediterranean and Indian Ocean were seriously threatened. Today, the U.S. Navy increasingly focuses on the littorals, suggesting the absence of a major maritime competitor. This condition, however, is neither permanent nor irrevocable.

One of the primary ways to contain potential competitors geographically and to ensure presence in critical regions is through the use of bases—one of Mahan's greatest interests. Mahan's fascination with colonies and bases reflects not only his profound respect for history, but also the technological realities of his era. Without bases, a coal-fired fleet has enormous difficulty operating in periods of either war or peace, as amply demonstrated by the passage and loss of the Russian Baltic Fleet in 1905. Colonial possessions were important for both base facilities and economic exploitation in the mercantilist period.

Today, base rights are often the result of historical legacy and are subject to the domestic politics of the host country. They continue to be crucial for access to distant regions, to provide political influence in areas of potential instability, and to provide for a deterrent posture against more serious threats. One area of serious concern for the maritime strategy is the problem of managing risks while still maintaining adequate base facilities. Large base complexes are increasingly vulnerable to proliferating weapons of mass destruction. Use of their facilities in crisis may be denied or constrained by local political opposition. Efforts to provide for remote, self-sustained bases removed from the shores of allies and adversaries alike may prove either technologically infeasible or economically unaffordable. At the same time, public commitment to withdrawing from major base complexes will raise political concerns in our allies and may embolden potential adversaries or competitors, weakening perceptions of our commitment to maritime security, with consequent effects on maritime trade.

This maritime strategy must also reflect the changing nature of threats to global order and regional stability. Geoffrey Till has raised the key issue of state versus nonstate actors in his paper. Maritime powers must also consider the rise of other naval powers, whether regionally focused or global in scale. Some regional naval powers evolve into much more serious threats over time—Russia was a Baltic power in the eighteenth century and became first a Black Sea power in the nineteenth century and then a Pacific and later a global power in the twentieth century. Japan started as a power in Northeast Asia at the turn of the twentieth century but by 1942 threatened multiple adjacent regions including Southeast Asia, the Indian subcontinent, and Australia.

Regional powers can prove significant obstacles to even a dominant maritime power, particularly when located at strategic chokepoints. Britain went to great lengths to maintain access to the Baltic in the eighteenth and early nineteenth centuries, and the maritime threat of Fascist Italy caused enormous difficulties for British planners from 1935–1943. Powers with global

reach force maritime powers to fight for sea control in an oceanic, vice littoral, environment. Both Nazi Germany and the USSR sought to restructure the global system and possessed the resources to endanger maritime commerce on a global level.

Threats to the system do not have to be openly hostile. The role of neutrals and reluctant participants in the prevailing economic system can shape the nature of maritime strategy in both war and peace. U.S. concerns over the rights of neutral shipping remained an element of concern for the Royal Navy for over a century. The continental system briefly menaced British economic vitality from 1807–1812. Since the beginning of the twentieth century, oil and energy flows have been a major potential constraint on both the exercise of maritime power and the maintenance of a commercial global economy. Today we even see China successfully containing information flows, despite the presence of a seemingly pervasive global internet.

One key element in the creation of a U.S. maritime strategy will be the balancing of current and projected or potential threats. The United States is currently fighting a “long war” against a transnational nonstate movement that pursues its political ends through terrorism (among other means). This conflict imposes significant military and economic costs on the United States that will shape, to some extent, the size and role of the future U.S. Navy and its ability to carry out any maritime strategy. These costs include the impact of prolonged operations on the ground forces of the United States and the need to assign naval personnel to provide a wide range of assistance and support functions, the need for greater maritime domain awareness, and a gradual drawing down of some oceanic capabilities (including antisubmarine warfare) in favor of more littoral ones (interdiction).

On the other hand, while the United States may not discern an emerging peer competitor, significant regional powers are expanding their maritime capabilities in core maritime areas. Although none of these states is necessarily a U.S. adversary (and two, in fact, are democracies), each is creating significant regional maritime power in areas of intense commercial and economic importance. China continues to pursue greater maritime reach and capability. It is also building a formidable capacity to menace Taiwan, although whether a war in the Taiwan Strait will ever occur remains an uncertain proposition at best. India’s maritime doctrine seeks to expand Indian influence to encompass the entire Indian Ocean, from East Africa to the Indonesian archipelago. Indian maritime interests have been matched by a naval modernization program and increased naval cooperation—Indian naval vessels engage in exercises with a wide range of partners and have recently engaged in humanitarian missions throughout the Indian Ocean and in the Mediterranean during the Lebanon crisis of 2006. Japan is extending its own maritime reach to the Straits of Malacca. Finally, even weaker maritime powers (including Iran) are now taking advantage of existing and emerging technologies to create a formidable anti-access capability, which can threaten vital chokepoints and complicate U.S. military intervention in times of crisis.

The absence of a global threat, and the interest of many nations in maritime security and economic stability, increase the opportunity for sharing burdens and operating in collaboration. Economic stability and maritime security require international cooperation and the maintenance of international law. In addition, maritime powers have traditionally maintained their position through sharing the benefits of sea power. The United States currently has a vital economic and national interest in the status quo and must recognize that it can neither maintain its prosperity in isolation from the international system nor maintain the system by itself. Because most other states either do benefit or potentially can benefit from the existing international economic order, the United States should, whenever possible, engage them in helping keep good order at sea and collaborate to the maximum extent possible in peacetime. U.S. leadership must also recognize, however, that states that collaborate with us in peace may not choose to follow us into war. A maritime coalition is not necessarily the same as a wartime alliance.

If we are designing the maritime strategy with a 20- to 30-year vision, planners must consider four key issues for which there are no obvious answers. The first is the relative priority of forward presence versus homeland defense. For decades the U.S. Navy could achieve the latter by focusing almost exclusively on the former. Today, the availability of destructive technology and ease of its transfer and use make homeland defense a greater priority than ever. A second issue is whether the United States should seek to dominate or manage technological change. The Royal Navy successfully maintained its maritime dominance throughout the nineteenth century through the management of technological change. The United States seeks a state of constant technological transformation. It is not clear, given current economic and industrial trends, whether the United States will be able to continue dominating the technological arena.

A third issue is whether the maritime strategy should focus on the preparation for war (managing the global economic system and the maritime environment) or on war proper (the Long War). The former requires more emphasis on the oceanic environment and the crucial sea lanes in the Pacific and Indian oceans, while the latter is more littoral-focused and centers around the Middle East. Finally, the United States must consider the role of coalitions and diplomacy. The United States currently does not face a peer competitor or system-challenging power. If such a threat does emerge in the near future, it will be the result of a coalition of hostile regional and medium powers. Realistically, this can only come about if the United States alienates significant players in the international system, or if we withdraw from the system and others must fill the vacuum. It is worth remembering that the only serious challenge to British maritime dominance—the naval campaigns of 1778–1782—came about as the result of a coincidence of British strategic overstretch, British naval disarmament, and the diplomatic alienation (or neutrality) of all the other major European powers.

The virtues of collaboration and coalition-building, vice unilateralism or isolationism, are obvious: greater economic benefits to all participants in the international system, and enhanced stability in the maritime domain. The 1000-ship navy concept is an important step in this direction. The U.S. Navy's role is vital in ensuring the stability of the system, as well as in deterring and defeating threats to it. This conference, and others like it, will help shape the strategy that will make it possible, and I'm delighted that we all have this opportunity to play a role in that process. Thank you.

Panel I: Maritime Strategy in a Globalizing World

Summary of Discussion

Dr. John H. Maurer
Chairman, Strategy and Policy Department
U.S. Naval War College

The Ruger Conference began with presentations given by Panel I, consisting of Barry Posen, Geoffrey Till, and Timothy Hoyt. Their presentations triggered a lively, informative, and insightful discussion about globalization, nationalism, and grand strategy.

A leadoff question about globalization led to a wide-ranging discussion about the position of the United States in the international strategic environment. One panelist highlighted how many around the world identify the United States as the principal agent of globalization. “We are globalization HQ,” he put it. The military predominance of the United States’ armed forces serves as an enabler of globalization. Those around the world who oppose globalization come to view the United States as the cause of their problems. The backlash against globalization often targets the United States. The United States thus might benefit if it were not so closely identified with globalization. Another panelist argued that globalization means states within the international system are more open to outside influences. One participant argued that American decision makers and analysts must ask the fundamental question of whether globalization is an unalloyed good. Another aspect to consider is to calculate the benefits and costs of globalization for the United States. In response, one participant noted just how difficult it is to undertake an assessment of the benefits and costs associated with an open international economic system. Trying to determine when the costs of an open international economic order, as measured in defense effort, outweigh the benefits poses an extraordinarily difficult analytical task.

Another topic discussed was whether a maritime country such as the United States can insulate itself from regions in the third world that are caught up in large-scale violence. One participant noted that the famous maritime strategic thinker Sir Julian Corbett quoted approvingly the maxim of the sixteenth-century philosopher Sir Francis Bacon: “He that commands the sea is at great liberty and may take as much or as little of the war as he will.” Does that strategic principle still hold in the twenty-first century? One of the panelists argued that it did: a dominant maritime power can protect itself to a remarkable extent from regions shaken by violence. This violence, the panelist argued, could be contained. The United States might even consider writing off regions that would require a major effort to pacify. Commanding the maritime commons, then, confers strategic advantage and affords a range of strategic options to the United States. The international system is not so tightly knit together as is often assumed by policy and strategic analysts, and the United States actually has considerable freedom of action on the world stage.

The efficacy of following a grand strategy of offshore balancing provoked a lively discussion. One panelist also argued that those who propose a grand strategy of offshore balancing for the United States have respect for the power of nationalism. Attitudes about nationalism are a key marker in distinguishing between competing points of view about the strategic wisdom of outside intervention. While the fighting in Iraq has induced more caution among American decision makers, there still exists in the United States an influential body of opinion in favor of undertaking interventions in an attempt to reengineer the politics of countries in the developing

world. Liberal internationalism, in other words, remains the dominant worldview of American policy makers despite the fighting in Iraq.

Another panelist highlighted that the experience of Great Britain provides an historical example of offshore balancing as a grand strategy. In 1914, for example, Britain could not afford to stand aside when Germany invaded France and Belgium. Britain had no real choice but to fight with coalition partners to prevent Germany from overthrowing the balance of power in Europe. The British example, then, can show the limitations of a grand strategy of offshore balancing. In a similar way, the United States might find that it cannot afford to stand aside in an important region engulfed in violence. A hardheaded calculation of the risks inherent in a new version of containment is difficult to undertake.

One conference participant highlighted how important it is for the United States to find the right fit between force structure and the country's overarching strategic aims. One panelist reminded participants, however, how in the past naval planners have often not received clear guidance about policy objectives from their political masters. Instead, naval leaders and planners have had to define roles and missions that are essential for a country's security and develop capabilities to operate in the maritime domain to meet those tasks. Alfred Thayer Mahan meant for his famous studies on *The Influence of Sea Power upon History* to educate policy makers and the public, as well as naval officers, about the strategic importance of navies in determining the security and prosperity of great powers.

One panelist brought up the important issue of domestic political considerations in shaping the defense budget. Force planning and development do not occur in a domestic political vacuum. A domestic political consensus for a larger force structure might not exist in the United States. Technology would provide a substitute for numbers. One conference participant argued that during the 1990s the United States was moving toward a force structure best suited to a grand strategy of offshore balancing. A panelist expressed the view that the United States already spends a considerable amount on defense. The United States, in his view, is unlikely to provide more resources for defense. Consequently, naval leaders must focus their resources on core naval missions and provide for the country a buffer from security threats.

The presentations made by Barry Posen, Geoffrey Till, and Timothy Hoyt, along with the subsequent discussion, completely fulfilled the expectation of conference organizers. The panelists were commended for their presentations framing the choices in grand strategy that face the United States at the beginning of the twenty-first century.

Panel II

Economic Prosperity and Maritime Strategy



Dr. Richard N. Cooper

Maurits C. Boas Professor of International Economics, Harvard University

Dr. Ellen L. Frost

Visiting Fellow, Institute for International Economics, and Adjunct Research Fellow,
Institute for National Strategic Studies, National Defense University

Moderator:

Dr. Peter Dombrowski

Chairman, Strategic Research Department, U.S. Naval War College

Economic Prosperity and Maritime Strategy

Dr. Richard N. Cooper

**Maurits C. Boas Professor of International Economics
Harvard University**

This conference is about grand strategy and maritime strategy. I suggest that the United States is incapable of having a coherent grand strategy, at least in peacetime. The interests and values of Americans, while bearing common elements at a high level of generalization, are too diverse and specific, and the U.S. political system operates in a too-cacophonous and inconsistent way to adhere consistently to any grand strategy. This does not mean that individual Americans cannot outline coherent grand strategies or fancy themselves as grand strategists. But their observations and recommendations will simply merge into the general cacophony of political discourse in the United States.

President Bush notwithstanding, the United States is not now at war. It has a hateful adversary in al-Qa'ida, capable of doing harm through specific acts against Americans or allied persons, but it is not capable of threatening the viability of the United States as a state or the American political and economic systems, except insofar as Americans allow it to do so.

Ideally, a maritime strategy would be the naval component of a grand strategy. In the absence of a grand strategy, any maritime strategy will necessarily have a somewhat ad hoc character. But that does not mean that some sensible things cannot be said about it.

Americans have achieved an unprecedented level of material prosperity, and they have built a flexible and innovative economic system, supported by rule of law, capable of producing, sustaining, and augmenting that prosperity. Americans clearly value it and seek even higher levels of prosperity—hence they share widely this particular national objective, although a few dissenting voices fear the environmental consequences.

Prosperity presupposes a minimum level of physical security, from external, internal, or even natural causes (such as earthquakes or contagious disease). Americans expect government—federal and local, as appropriate—to provide such protection, supported by private initiative and action.

Americans have high respect for their constitutional processes, even while having low respect for elected politicians. Foreigners were amazed at the lack of protest in the United States over the presidential election of 2000. Americans accepted the decision by the Supreme Court, even though the entire process surrounding the Florida election was arguably deeply flawed.

Although some Americans are reluctant to acknowledge it, U.S. prosperity is deeply dependent on engagement with the rest of the world. Some dimensions of this dependence are obvious, such as the importation of oil (now over half of consumption) and other minerals; export markets for high agricultural production; and large capital inflows to supplement U.S. domestic savings. Other dimensions are less obvious, such as the immigration of talented individuals; the importation of fertile ideas from elsewhere, especially Europe and Japan; the immigration of young unskilled workers, supplementing the slowing growth of American-born (and increasingly educated) workers; and competition provided by foreign products, which not only helps sustain a high standard of living but also prods cost-reducing productivity increases or product and design innovation by U.S. firms.

Thus, Americans have an interest in preserving, maintaining, and enhancing world prosperity through a viable international economic system. The United States has taken the lead in the past half century and, as 30 percent of the world economy, must continue to take the lead in maintaining and improving the international economic system. There is no likely alternative to the United States. Other countries are unlikely to take grand initiatives (although they do from time to time), not least because no global initiative can succeed without the active cooperation of the United States, and Americans are more likely to engage seriously if they have taken the initiative.

Much is heard these days about the rise of emerging countries, most notably China and India, but also Russia, Brazil, and others. The journalistic hype needs to be put in quantitative perspective. Table 1 reports one plausible projection of the world economy, adapted from the U.S. Department of Energy (DOE), to the year 2025. In it China and India are assumed to do well, that is, to enjoy rapid growth without serious stumbles. But the United States is also expected to grow during the next few decades, and it starts from a much higher base. Thus, China is projected to grow by 7.2 percent a year in dollar terms, to \$8.1 trillion in 2025, in dollars of 2005. (DOE projects China's annual growth at 6.2 percent; I have augmented it by 1 percent a year to allow for some real currency appreciation; similarly for India. I have also incorporated the 2005 upward revision of Chinese GDP.) The United States is projected to grow by 2.8 percent a year, which, if anything, is on the low side. Even so, China's economy remains less than 40 percent the size of the U.S. economy in 2025, and with four times the population Chinese will remain much poorer than Americans, even though they will be over three times richer than they are today. China will recently have passed Japan, the world's second largest national economy, in size.

India's starting position is behind China's, and its growth, while a very respectable 6.2 percent annually in dollar terms over the period 2000–2025, is below China's. India will have reached about 11 percent the size of the U.S. economy by 2025, making the two together less than half the size of the U.S. economy.

Largely for demographic reasons, the European Union (controlling for size of membership) and Japan will both decline in relative terms (e.g., Japan from 43 percent of the United States in 2000 to 32 percent in 2025). But both will still remain large economies, important players in the world economy, and important trading partners of the United States.

One sometimes sees much larger figures for China and India, and smaller figures for Japan and Europe. These are based on purchasing power parity conversion rates. While allowing for differences in local purchasing power is appropriate—indeed, necessary—when comparing standards of living across countries, it is entirely inappropriate when comparing the impact of a country on the world economy. World trade and investment take place at market exchange rates, not ppp conversion rates; and even military equipment and, increasingly, high-quality personnel command world prices. As noted, allowance has been made in the figures of Table 1 for some (1 percent a year from 2000) real appreciation of the currencies of China and India, relative to the U.S. dollar.

One implication of the relative size and wealth of the United States is that it will be able to outspend any other country, or indeed any small collection of countries, under any heading, such as national defense or research and development, if Americans choose to do so. Among rich countries today, the United States (along with Japan) has the lowest tax burden, at about 32 percent of GDP (taking into account all levels of government). Poor countries are able to raise even less revenue (relative to GDP), generally around 20 percent, although their capacity to raise revenue will rise with development. Americans have an exceptional aversion to taxation but can be persuaded to support expenditures necessary to deal with any perceived national emergency. One potential additional source of revenue for all countries, but especially for the United States, during the next two decades would be a tax on carbon emissions to avert seriously adverse climate change.

What should be the future maritime strategy of the United States, by which I mean what kind of fleet should the U.S. Navy (USN) be ordering now, and what kind of doctrine and training should it provide to naval and marine personnel in the coming decades?

A simple (and probably sensible) component of that strategy might be to maintain a navy that is no less than three times the sum of the next largest three navies (perhaps not counting close allies such as Britain and Japan in the reckoning). Such a policy should discourage any other country from challenging frontally the USN and its current dominant position in the world’s oceans. It would imply that, as today, the main threats to the USN would not come from other navies, but from air- and even land-based missiles, and, in future, space-based platforms that can reveal the location of U.S. surface ships and perhaps compromise or even eliminate U.S. observation and communication satellites on which the USN increasingly relies. Regional naval threats might emerge—for example, from submarines—but the USN would have the capacity to reinforce any region where such a threat emerged and to replace any losses. (All references to the USN are meant to include, where appropriate, the Marine Corps, since a navy’s capacity to influence developments on land is limited without the Marines.)

A more ambitious strategy would be to configure the U.S. Navy for sea basing, that is, for provision at sea of headquarters, intelligence, logistics, supply, and air support for a significant land-based operation, until sufficient land is acquired to move some of these functions ashore.

A still more ambitious strategy, but with different objectives and orientation, would be to create and maintain a navy that, along with allies in close coordination, could police the seas against all undesirable human activity, for example, to suppress piracy, trade in drugs, movements of weapons of mass destruction and even lesser weapons, movements of “most wanted” persons, movements of slavers and kidnappers—that is, a role of global law enforcement, insofar as that can be done from the sea, obviously in cooperation with land-based law enforcement authorities.

The United States could easily afford the first strategy, even if other countries decided to augment their existing naval forces significantly. It spends more today on naval forces than all other countries put together. It could also afford the second strategy, at least for modest land engagements, if it chose to do so, but that would probably call for more resources than are now being provided. Whether it could afford the third strategy would depend on exactly how ambitious it was in scope and how much cooperation the United States received from other countries—it would have to be a collective endeavor, partly for resource reasons, partly because the United States could not effectively carry out the assignment in the absence of close and continuing cooperation with other key governments, plus at least the acquiescence of those not actively engaged in cooperation. The constraint on the third strategy, with enough suitable partners, is less likely to be economic resources than political resolve to persist in a task that at best would take many years and indeed would have no clear termination date.

Table 1
Projections of GDP to 2025

(trillions of 2005 U.S. dollars)

Country	2000	2025
USA	10.94	22.04
China	1.42	8.05
India	0.49	2.37
Japan	4.74	7.09

Source: Adapted from *Department of Energy World Energy Outlook*, 2004

Asia's New Wealth and Its Implications for Maritime Strategy

Dr. Ellen L. Frost

Visiting Fellow, Institute for International Economics
Adjunct Research Fellow, Institute for National Strategic Studies,
National Defense University

National wealth is a strategic asset. Western prosperity contributed substantially to victory in the Cold War, not only because of America's ability to outspend the Soviet Union but also because Western lifestyles and ever-higher standards of living eclipsed those behind the Iron Curtain. In the wrong hands, however, wealth can be destabilizing: consider the booty amassed by diamond traders in Africa, kleptocrats in Russia, and warlords in drug-trafficking regions of Afghanistan. How wealth is distributed also shapes prospects for stability and growth, although this factor is not decisive.

In Asia, the focus of this essay, the combination of globalization, technology, and high levels of education has spurred the highest growth rates in the world, created jobs, and contributed significantly to peace and stability.¹ Asia's new wealth is heavily concentrated in maritime cities and coastal regions. Predictably, however, rising prosperity in these regions brings new threats and revives old ones. What does Asia's new wealth imply for U.S. maritime strategy in Asia?

In brief, I argue that the U.S. Navy and, in some circumstances, the U.S. Coast Guard are better suited to cope with wealth-induced changes in Asia's strategic landscape than is the Army or the Air Force. But the mission of U.S. naval forces stems from developments beyond the Navy's control (notably U.S. policy in the Middle East and the resurgence of China). This means that a "maritime strategy" is necessarily reactive. The strategic challenge is that the balance of relative influence in Asia is slowly shifting away from the United States in favor of China. This shift is not zero-sum, but, since China's future evolution is unknown, it carries long-term risks. A series of small but meaningful steps taken in Washington could help restore U.S. influence.

The Strategic Setting

On the one hand, Asians have more freedom to construct their own future than at any time in recent history. The Cold War's rigid overlay has melted away. No government exports revolution or seeks to overthrow another. The peaceful settlement of disputes is now an established habit. (China insists that Taiwan is a domestic issue.) Democratization of one kind or another has made strides. Most governments are stable or nearly so. Islam in Southeast Asia is becoming infected by extremists but inherits a moderate tradition. Regionwide stability and market-oriented economic policies have raised living standards and brought into being a large middle class.

On the other hand, many Asian governments still struggle to complete the process of nation-building. Globalization has complicated their task by widening the income gap between

1. I define "Asia" to include the 10 members of ASEAN plus China, South Korea, Japan, Taiwan, and India. The "ASEAN 5" are the five founders of ASEAN: Indonesia, Malaysia, the Philippines, Singapore, and Thailand. The other members of ASEAN are Brunei, and the "CLMV" countries: Cambodia, Laos, Myanmar, and Vietnam. With the growing exception of Vietnam, Brunei, and the CLMV countries do not play a significant role in the trends analyzed here.

“winners” and “losers.” Per capita income in coastal regions continues to rise faster than incomes in the interior.² The financial crisis of 1997–98 toppled governments, sent millions back into poverty in hardest-hit Indonesia, and revealed both the weaknesses and the interdependence of Asian economies. Sudden Acute Respiratory Syndrome (SARS) temporarily halted business activity, and an avian flu pandemic would be far worse. The attacks of September 11, 2001, inspired a hidden network of terrorists to bomb and kill. Pirates armed with high-technology equipment find rich pickings off the coast of Indonesia, Malaysia, and India, and on the high seas.

Environmental threats to maritime areas deserve special mention. Oil spills are increasing. People are flooding into port cities, severely straining water and sewage resources. Disease spreads more rapidly in overcrowded maritime cities than elsewhere. The tsunami of December 2004 was particularly devastating because large sections of the natural barrier to tidal waves—mangrove forests—have been cut down. Meanwhile, global climate change is raising the likelihood of violent storms; insurance companies are already hinting of higher rates. Unless something is done to curb and transform energy consumption, rising water levels associated with climate change will flood maritime areas, the heart of Asia’s new prosperity.

Another challenge associated with rising prosperity is the revolution in shipping. In 1958, the largest container ship had a capacity of 58 twenty-foot equivalent units (TEUs), the standardized global unit of measurement. Today’s largest ships can carry over 6,000 TEUs, and designers are planning ships capable of carrying 13,000 TEUs. Ranked according to TEUs actually handled, the world’s top six ports are all in Asia: Hong Kong, Singapore, Pusan, Shanghai, Kaohsiung, and Shenzhen. (U.S. ports Los Angeles and Long Beach were ranked seventh and thirteenth, respectively.) Most other ports in Asia cannot currently handle huge container ships. Bigger ships and fewer available ports spell more opportunities for terrorists to attack highly visible targets.

The Resurgence of China

Of all the structural changes in Asia’s strategic landscape, none stands out more forcefully than the resurgence of China as a commercial powerhouse and magnet for investment. All developing countries in Asia except Singapore have become more dependent on trade, particularly trade with China. China has become the number-one or number-two trading partner for most countries in the region. (China itself has become more dependent on markets in Europe and North America.) China’s sheer size and market power convey implicit leverage.

What is remarkable is not so much the level of economic prosperity (millions of Chinese are still at the poverty line) as the speed of change. Although China’s share of world trade was only about 4 percent in 2000, China has accounted for about 12 percent of the growth of world trade since then. Although China’s oil consumption is only about one-third the U.S. level, in the past decade China has accounted for 30 to 40 percent of the growth in demand for oil. By 2020 China will likely import 70 percent of its oil needs, as opposed to 40 percent today.

2. This connection between prosperity and maritime regions is not unique to Asia. Jeffrey Sachs and two of his colleagues found that the regions of the United States, western Europe, and temperate-zone east Asia that lie within 1,000 kilometers of the coast account for only 5 percent of the world’s inhabited land but at least 37 percent of the world’s GNP (measured in terms of PPP). In Asia, the poorest countries are landlocked Laos and self-isolated Myanmar (Burma). See Gallup, John Luke, and Jeffrey Sachs, with Andrew D. Mellinger, “Geography and Economic Growth,” paper prepared for the Annual Bank Conference on Development Economics, Washington, D.C., April 20–21, 1998.

China's new wealth has enabled Beijing to take advantage of a relatively new geopolitical trend: the widespread use of commercial diplomacy, particularly so-called free-trade agreements (FTAs). The Asian financial crisis of 1997–98 presented China with a perfect opportunity. Although the United States had extended assistance to Mexico during a similar crisis three years earlier, it did nothing to help Thailand. China got credit for not devaluing its currency and offered FTAs to Thailand and subsequently to ASEAN as a whole. (The value and depth of the China-ASEAN FTAs are open to question, however.) Beijing also uses “infrastructure diplomacy” with great skill, financing and manning huge infrastructure projects in other countries—without the “strings” imposed by other donors.³

Most Asians now see China as an economic opportunity rather than a security threat. Their companies are scrambling to find a niche in China-centered production networks. Asian governments believe that China's recent military buildup is aimed at Taiwan and does not threaten them directly. They note that China ceased exporting revolution long ago and needs a peaceful environment to pursue economic modernization, its number-one priority. Beijing has settled virtually all of its land-based border disputes and has put its maritime ones on the back burner, at least for now.

India takes a slightly different strategic view. Indians seek closer engagement with China's economy and have mended fences with Beijing, but they are wary of China's growing power. India participated in the tsunami relief effort and has strengthened ties with South Korea and Japan and launched negotiations for an India-ASEAN FTA. Along with Australia and New Zealand, India was invited to the first-ever East Asian Summit, held in Malaysia in December 2005. But although India is a maritime power and strategic player, it has not accumulated enough wealth to win respect.

Asian Perceptions of the United States

Asians worry that the United States has lost high-level strategic interest in the region, particularly Southeast Asia. Concerns center on America's costly war in Iraq, steadfast support for Israel's policies in the Middle East, post-9/11 fixation on antiterrorism forces, and huge deficits, and the influence of anti-China “hawks.” Asian officials complain that American officials pursue a U.S.-centered agenda instead of listening to what Asians need. This perception contributes to a shift in the balance of relative influence in favor of China. This shift is not zero-sum and much of it is healthy, but it calls for strategic attention.

The Asian Integration Movement

The combination of mounting economic interdependence, cross-border threats, China's rising power, and America's perceived neglect are prompting national governments to revive and accelerate a drive toward closer regional integration. Their agenda includes many maritime components, such as antipiracy operations. The most significant is the “Eye in the Sky” network of joint patrols in and over the Strait of Malacca, conducted by Singapore, Indonesia, and Malaysia.

ASEAN, established in 1967, has been in the driver's seat of the integration movement. Its hallmark statement of principles is the Treaty of Amity and Cooperation (TAC). Of the various

3. For a more complete discussion, see my chapter, “Promise or Threat? China's Commercial Diplomacy in Asia,” in William W. Keller and Thomas G. Rawski, eds., *China and the Balance of Influence in Asia* (Pittsburgh: University of Pittsburgh Press, forthcoming). See also Phillip C. Saunders, *China's Global Activism: Strategy, Drivers, and Tools*, Occasional Paper 4 (Washington, D.C.: Institute for National Strategic Studies, National Defense University), October 2006.

regional organizations that ASEAN has brought into being, the grouping known as ASEAN + 3 (ASEAN plus China, South Korea, and Japan) has become the most institutionalized. China makes subtle efforts to marginalize Japan in this forum but takes care not to dominate it.

The Asia Pacific Economic Cooperation forum (APEC) is trans-Pacific in scope and is thus a benign strategic counterweight to ASEAN + 3. Taiwan is a “member economy,” and so is Hong Kong. APEC lost altitude in the 1990s, and its 1994 commitment to “free and open trade and investment in the Asia Pacific” by 2010 (2020 for developing countries) has lapsed into obscurity. But APEC conducts much useful work, especially in the energy field but also in many nitty-gritty areas such as customs, visas, and port security. Australia’s chairmanship in 2007 offers a perfect opportunity to revitalize APEC and restore some of America’s lost influence. Some advocate a “Free Trade Area of the Pacific” (FTAAP). Such an agreement would embed pan-Asian trade agreements in a wider context and could spur the European Union, India, and Brazil to revive and complete the now-faltering Doha round of global trade negotiations.⁴

Implications of Asia’s New Wealth for Maritime Strategy

U.S. forces in the western Pacific and Indian oceans face no major threat. They cannot devise a freestanding maritime strategy because their main missions are determined by events and trends beyond their control. They must be reactive, and what they must react to is too complex to be defined and pinned down in enough detail to be meaningful.

According to the National Security Strategy, U.S. forces are part of a mission that includes fighting terrorism, preventing attacks on U.S. allies and friends, defusing regional conflicts, and preventing access to and the use of weapons of mass destruction. These threats have a complicated anatomy, but at least two of them—terrorism and nuclear proliferation—are arguably fanned (if not caused) by U.S. policies in the Middle East and by long-standing U.S. nuclear and nonproliferation policies, respectively. The other two—preventing cross-border attacks—are being managed primarily by Asians or, in the case of the Korean Peninsula, in the Six-Party Talks.

As for the Navy’s traditional missions, U.S. naval forces already dominate the high seas. Moreover, if called on to do so in a crisis, they could blast open a major sea lane or strait. They probably cannot achieve “maritime domain awareness” on their own, but U.S.-sponsored training and joint exercises are slowly strengthening local capabilities in the region. (Excessive classification, however, remains a problem.)

What remains is influencing events onshore. In my view, U.S. maritime forces are best suited to this mission. At the risk of sounding superficial, ground combat forces move too slowly (and should not be sent to Asia anyway), and Air Force planes fly by too quickly. Naval forces move at the right speed—not too fast, not too slow—and can hover on the horizon. The mere sight is reassuring or threatening. The technology, training, and education that the Seventh Fleet can offer are prize assets. Senior naval officers have extensive experience in the Asia Pacific and strong military-to-military ties. They understand the need for diplomatic subtlety and the nuanced, slow-moving nature of Asian-style negotiations.

The U.S. Coast Guard, too, is well suited to the new strategic environment. Maritime Asia is where a lot of threats arise. Illegal human trafficking, drug smuggling, the plundering of endangered resources, the ferrying and financing of terrorists, and a variety of other threats cluster in maritime zones and pose a bigger risk to U.S. friends and allies than conventional attack.

4. C. Fred Bergsten makes the case for a FTAAP in “Plan B for World Trade: Go Regional,” *Financial Times*, August 16, 2006, available at <http://www.iie.com/publications/opeds/oped.cfm?ResearchID=655>.

What Can the Navy Do?

The Navy is already in a strong position in Asia and faces no near-term threats. Over time, as China gets richer and consumes more oil, Beijing will naturally want to acquire larger naval forces and reduce its dependence on the United States to protect its oil imports from the Middle East.⁵ Whether that prospect is alarming or not depends on how China's domestic polity adapts to engagement with the global economy and global society in the next 10–20 years.

To help restore U.S. influence in Asia, the Navy should press authorities in Washington to

- Sign ASEAN's Treaty of Amity and Cooperation (TAC) and submit it to Congress, perhaps as part of a larger package. U.S. officials apparently fear that the TAC would preclude humanitarian intervention and jeopardize sanctions against Myanmar (Burma), thus arousing Congressional opposition, but these issues can be handled quietly, vaguely, and implicitly, Asian-style.
- Jointly propose a full U.S.-ASEAN summit meeting.
- Commit the United States to revitalizing APEC, including high-level representation, adequate budget resources, and support for trans-Pacific trade initiatives. President Bush's November 2006 trip to Asia signaled first steps in this direction.
- Reduce the excessive classification of systems and technologies, which dilutes the value of joint exercises.
- Revise the allocation of budget expenditures to reflect greater responsiveness to Asian needs.

5. For a more complete discussion, see Kenneth Lieberthal and Mikkal Herberg, *China's Search for Energy Security: Implications for U.S. Policy* (Seattle: National Bureau of Asian Research, April 2006).

Panel II Discussion: Economic Prosperity and Maritime Strategy

Summary of Discussion

Dr. Peter Dombrowski

**Chairman, Strategic Research Department
Naval War College, Newport, R.I.**

American maritime strategists often assume that maritime security is a prerequisite for a stable and growing global economy. After all, most of the world's commerce by weight, volume, and value travels across the high seas; the oceans (and the ocean floors) themselves are a source of wealth from activities ranging from fishing to deep-sea mining. American strategists also generally believe that it is the responsibility of the United States to provide maritime order, either acting alone or in concert with other maritime powers. For most of the post-World War II period the U.S. Navy has assumed this role, even if sometimes by default, as it sought to combat the spread of the Soviet navy's influence across the globe.

These assumptions are seldom challenged and have been repeated in official documents and commentaries by analysts friendly to the maritime services, including the U.S. Navy, the U.S. Marines, and the U.S. Coast Guard. Rather, many strategic and policy debates center on what roles and missions each service should assume to ensure American and thus global economic security. Others, such as the recent international dialogue over U.S. Chief of Naval Operations (CNO) Admiral Michael Mullin's proposed 1000-ship Navy, center on the relationship between American maritime services and those of the rest of the world. Last year, for example, the CNO argued that the Navy should join with its counterparts to guard against nontraditional security threats—such as piracy and maritime terrorism involving nonstate actors—in addition to threats to national security by neighboring states.

The question remains often unasked, however: what exactly is the relationship between maritime security and global economic prosperity? If we can find answers to this question we can better determine the responsibility of the United States for using its maritime services to protect the global commons, either unilaterally or in conjunction with other nations.

The U.S. Economy

Despite being a continental economy more self-sufficient than many other countries, the United States has become interdependent with the world over the last fifty years. First as a large exporter of goods and now as an enormous importer, the nation depends on the rest of the world for everything from petroleum products to high-technology goods. The bulk of this trade in goods leaves and arrives via megaports in Asia and Europe. American workers and consumers enjoy the economic prosperity they currently possess in large part because the country is interconnected with the dynamic global economy. Even when the United States is not directly a recipient of a good, American firms, including financial services firms, have interests in commerce moving from point to point in other parts of the world. In brief, the United States has an enormous interest in the success of, not only its own society, but that of nations as diverse as Saudi Arabia, Nigeria, Russia, Germany, Japan, and China.

The successful American economy is the foundation for American diplomatic, political, and military power in the world. Although this is widely acknowledged, the analytic process

currently being used to help develop a new maritime strategy has, at the direction of the CNO, not yet emphasized the resource implications of the new maritime strategy. The reasons underlying this guidance are wise. If the strategy development process focused on resource discussions it might quickly devolve into debates over force structure and naval platform characteristics. It would allow greater entrée for partisans of various acquisition programs and operation communities to introduce their firmly held convictions about the wisdom of their pet projects relative to those of others. Yet, as both panelists Dr. Richard Cooper and Dr. Ellen Frost acknowledge, a vibrant American economy allows the state to tax citizens and extract the material and financial resources necessary to fund the maritime services, including the Navy. Of course, in a democracy, the public's tolerance for taxes and thus military spending depends in part on the demonstrated return on its investments.

America's new maritime strategy must therefore guard the security necessary for American prosperity in an interdependent international economy without undermining the very source of the predominance of the U.S. Navy, Marine Corp, and Coast Guard.

Global Economy, Key States, and Regions

Many economists have a relatively sanguine perspective on global security in the future. They believe, rightly or wrongly, that the global economy is on an upward trajectory and that this path will not only increase the wealth of nations and the living standards of individuals but also, in the end, lead to a less conflictual world order. The fundamental rationale underlying this assessment is that globalized economic growth will remove many traditional sources of international conflict. National leaders will no longer seek advantage over their neighbors and enemies by acquiring territory, destroying mutual economic interests, or even undertaking actions that might harm the global economy, because they realize that in an interdependent economy such actions will weaken their own prosperity and prospects for future economic growth.

Of course, many international relations scholars, especially those from the Realist tradition, are skeptical of these claims. International relations scholars in general often point to the multiple sources of conflict, both inter- and intrastate, from ethnic divisions to religious and cultural differences. Realists also note that differential economic growth rates can lead to destabilizing conflicts as rising economic powers seek political and military analogs to their growing material wealth. Moreover, the rising tide of a globalized world economy may lead to controversies over relative and absolute gains that defy hypotheses about democratic and commercial peace.

The Economics and Maritime Strategy panel rightfully highlighted the fastest growing region in the global economy: Asia. Take, for example, the case of China. Statistical projections of China's economic growth out to 2020, made with modest trend line extrapolations, give the lie to alarmist predictions that China will soon surpass the United States as the world's largest economy. Yet projections and trends tell us little about how China will seek to use its growing economic resources. Current strategic thinking in the United States remains of two minds about the rise of China. Some fear that China will modernize its military in order to challenge the United States and other regional powers in Asia, such as Japan. Others believe that Chinese leaders, perhaps under the influence of a growing business community, will recognize their own dependence on the free flow of commerce. They will be loath to take steps—whether by seeking reunification with Taiwan by force or by challenging the American Navy's role in protecting freedom of the seas—that might weaken its vulnerable and dependent national economy.

The new maritime strategy will be written in a context where strategists remain uncertain as to the impact of China's rise, not just on the Sino-American bilateral relationship, but on interregional relations and the overall global economic and political balance.

Impact on Maritime Strategies

Regardless of the lack of quantitative or qualitative evidence of a direct relationship between maritime security and prosperity, our experts and workshop participants appear to agree that a strong American maritime presence is important. Dr. Cooper laid out an ascending set of options, from a minimalist approach that would keep the size of American naval forces at “no less than three times the sum of the next largest three navies (perhaps not counting close allies such as Britain and Japan in the reckoning)” to a more maximalist approach that would “be to create and maintain a navy which, along with allies in close coordination, could police the seas against all undesirable human activity.” Given the predominance of American power and its enormous economic advantages over potential competitors, all options except the last could be accomplished using U.S. taxpayer funds. The maximalist approach would be more difficult for the United States alone, but it could be achieved with the cooperation of other maritime powers. This, however, would require a multilateral approach to security that only now is beginning to reemerge in American defense strategy. The current Chief of Naval Operations, Admiral Michael Mullin, has already spent more than a year working out the details of collective maritime security. From the germ of an idea represented by the 1000-ship navy concept to the recently identified global maritime partnership, Admiral Mullin’s vision is closing in on reality.

Ellen Frost took a straightforward approach that considered what the Navy should look like in a future dominated by Asian economic growth and the continuation of globalization. The flexibility and attention to traditional roles, such as protecting commerce, that she advocates may indeed be the only way forward.

Panel III

Economics and Emerging Maritime Powers



Dr. Stephen Philip Cohen

Senior Fellow, Foreign Policy Studies Program, Brookings Institution

Robert O. Work

Senior Defense Analyst at the Center for Strategic and Budgetary Assessments

Dr. Leif R. Rosenberger

Economic Adviser, U.S. Pacific Command

Moderator:

Dr. Mackubin Thomas Owens

Associate Dean of Academics for Electives and Directed Research and Professor of National Security Decision Making, U.S. Naval War College

India and the United States: Economic, Strategic, and Maritime Implications

Dr. Stephen Philip Cohen
Senior Fellow, Foreign Policy Studies Program
Brookings Institution

Any “National Security Strategy” that is ahistorical and culturally uninformed is unlikely to maximize American interests. On both counts, American strategy in the Indian Ocean region, especially as it pertains to India, the region’s most important maritime state and rising economic power, has more often than not been tone-deaf. This shortcoming was especially notable during the Cold War, when the Indian Navy (IN) was seen as a Soviet auxiliary, and India was thought to be the putative leader of a hostile nonaligned movement. Of course, Indians had their own stereotypes of the United States, and for nearly twenty years, from 1970 onward, American policy was seen as part of a China-Pakistan-U.S. axis that had India’s containment, if not suppression, as its chief objective.

These days are certainly over, and for a number of reasons both Washington and New Delhi have come to a more realistic (and optimistic) understanding of the possibility of strategic cooperation between the two states.

- The end of the Cold War forced both sides to reassess the U.S.-India relationship. That reassessment took several years to complete—and in some places in India America is still regarded as a threatening state—but by and large the two states interact as “normal” great powers should.
- The 1998 Indian nuclear tests began the process of removing the proliferation issue from the top of the bilateral agenda. The U.S.-India nuclear deal, if consummated, would complete that process.
- India’s economic growth spurt has attracted strong American corporate interest, and American companies now comprise a significant India lobby in Washington.
- With the exception of elements of India’s left, support for closer U.S.-Indian relations is strong across the political spectrum in both states.
- India’s military capabilities are now more realistically seen for what they are: limited, but highly professional, and thus capable of significant growth.
- Both India and the United States keep a wary eye on China; in both countries opinion about the question of whether China’s rise will be hostile or benign is fairly evenly distributed among strategic elites, including the military.
- Pakistan and India-Pakistan relations are not addressed by America’s current national security strategy. That strategy does not adequately deal with the prospect of (a) another India-Pakistan crisis (or war), (b) Pakistan’s role in fomenting what most American policy makers would call terrorism (but which Pakistanis regard as legitimate freedom struggles), (c) Pakistan’s economic and political incoherence, and (d) remaining questions about Pakistan’s nuclear program.

This paper looks ahead five to seven years and explores those areas where we see an important intersection between economic growth, maritime strategy, and strategic ties between the

United States and India. Our assessment is preliminary,¹ but our major conclusions are (1) that the Indian Ocean and maritime security will be the most likely area of military cooperation, (2) the autonomous growth of economic ties between India and the United States provides the ballast for the overall strategic and political relationship, ruling out any major swing toward a new hostility, (3) Pakistan, not China, is likely to be the major area of contention between Washington and New Delhi, and (4) India can do little regarding America's concerns about terrorism, and the issue has the potential to be divisive.

An Oceanic Partnership

The nadir of U.S.-Indian relations occurred when the USS *Enterprise* was ordered to play some unspecified role in or near East Pakistan toward the end of the 1971 India-Pakistan war. For the next twenty-five years the USS *Enterprise* was a ghost ship, spooking every U.S.-India dialogue. For India the ship symbolized an American attempt to deny India its greatest military victory (indeed, its only victory of any consequence) and to stymie India's quest for great power status. For the Nixon administration (and others) 1971 was a mere sideshow in the greater Cold War, and Indian anger was further proof of New Delhi's strategic immaturity and pro-Soviet leanings. For many years, American admirals regarded India as a Soviet surrogate.

This has now changed. The IN (and Coast Guard) are now seen, and see themselves, as a natural partner to the United States and other American allies in a whole range of maritime-related activities.² Both states have a common interest in keeping the oil and gas flowing from the Gulf to points east (India is now a major importer of hydrocarbons, most of it seaborne); the navies engage in annual exercises; they have cooperated on antipiracy operations, especially in Southeast Asia; Indian frigates have escorted U.S. submarines through the Malacca Strait; and there was close cooperation during the tsunami, cooperation that was politically beneficial for both countries.

Professionally, each navy holds the other in high regard, and IN flag rank officers, once very critical of the United States, have now reversed course, even if they are skeptical of American strategies in Iraq and elsewhere. For the first time the United States is seen as a source of quality ships and advanced naval technologies, and the recent sale of a landing craft is likely to be only the first of many significant transfers. Washington missed the opportunity of providing India with a carrier;³ an alert Pentagon should not miss such an opportunity again.

Politically, naval cooperation is easy to do with India. The major Indian ports are located in regions that are fast-developing and have an outward-looking perspective on the world, and where there is already a great deal of U.S. investment. India also has a few unsinkable aircraft carriers in the form of the Andaman Islands. Access to Indian bases there could be of great value to the U.S. Navy (USN) for operations in the South China Sea and elsewhere. Conversely, nothing is heard now of American facilities at Diego Garcia, long the subject of scathing Indian criticism.

Strategically, this cooperation could extend to stabilizing weak and failing states in the Indian Ocean region, especially those affected by natural disaster or whose failure might interrupt

-
1. This paper is drawn from a larger book project that examines the modernization of the Indian military and prospects for U.S.-Indian strategic cooperation over the next seven to eight years.
 2. The breakthrough came when the head of the Japanese Coast Guard invited the Indian Coast Guard to join in antipiracy operations (after an attack on a Japanese ship), bypassing Japan's constitutional restrictions on overseas military engagement.
 3. The USS *Ranger* was available, and offering it might have preempted a costly purchase of the *Gorshkov*.

energy supplies.⁴ Implicitly, it puts the United States and India in a position to balance any Chinese naval expansion. New Delhi and Beijing are already engaged in a soft competition for port access at the mouth of the Persian Gulf (and in Burma, where the United States has written itself out of the game); this competition is likely to intensify. Washington should enable India to match up with China at sea.

Economics: Ballast for State-to-State Relations

In a 1999 report the Council on Foreign Relations noted that there was no ballast for U.S.-Indian relations. That has dramatically changed with the rapid growth of the Indian economy and the participation of many leading American firms in that growth. Indian growth is expected to continue at more than 8 percent indefinitely; this could be even greater were India to accelerate its own reform program (the major bottlenecks are regional and local bureaucracies, union laws that inhibit the restructuring of Indian and foreign corporations, and domestic political turmoil in some parts of India, notably the north and the east). One consequence of this growth has been major investments *in the United States* by Indian companies; another has been the formation of an effective lobby in Washington, comprised of American companies with significant Indian investments.

Overall, while there may be much to quibble about, the rate of growth of economic ties has been astonishing, and generally beneficial to the United States, despite the offshoring of some medium-technology American jobs.⁵ This trend is likely to continue indefinitely.

Our Pakistan Problem (and India's)

The intellectual groundwork for current American policy was laid down in the early years of the first Reagan administration. Confronted with a Soviet invasion of Afghanistan, both Washington and New Delhi concluded that a rapprochement of sorts made sense. For Washington this was an opportunity to protect Pakistan's flank and to "wean" the Indians from the Soviet Union; for the Indians this was an opportunity to try to weaken or reduce American military support for Pakistan. These calculations led to Rajiv Gandhi's 1985 visit and an American policy that said, in effect, that we now had *two* friends in South Asia, India and Pakistan—the precursor of the "dehyphenization" policy of recent years.

However, this policy had and has one major flaw: it does not include an American attempt to grapple with the India-Pakistan rivalry. After the Kennedy administration, Washington gave up on attempting to move the two states toward a meeting point on Kashmir, contenting itself with pious statements about the need for dialogue and reconciliation during the several wars and numerous crises that characterized India-Pakistan relations from 1965 onward. While America has put itself squarely between the two states, this has only served to encourage each to use its bilateral relationship with Washington to influence Washington's ties with its rival. No American administration has had the courage or imagination to move any further (as some have done in the Middle East, where our friends are enemies, and the Balkans and elsewhere). This policy of smiling neglect works well when there are no India-Pakistan crises, but these have occurred with depressing regularity and, since 1990, have had nuclear overtones.

4. India offered its full cooperation to the United States in conducting operations in Afghanistan; this was a key element in Musharraf's decision to provide such support himself. India may still play a major role in Afghanistan, and it has a significant economic and consular presence there already.

5. On balance, offshoring helps the American economy by making American firms more efficient, although this does create some angst in the United States regarding lost jobs (and India is high on the list of states that are perceived as having benefited from offshoring). Ironically, Indian companies have diversified, establishing call centers in Ireland and West Virginia.

Competing Terrorist Paradigms

If the National Security Strategy seriously focuses on “defeating global terrorism,” it is either totally misconceived or totally misstated. Terrorism is a tactic of the weak; it has many causes and is present in many societies. While we see the gradual eradication of smoking in public places, attempting a defeat of global terrorism is tantamount to a defeat of all smoking (or perhaps bad breath). Obviously, what American policy makers really mean by such language is the defeat of radical Islamist terrorist attacks against the U.S. homeland and foreign properties and assets, but their rhetorical excess has led to serious backlash in a number of states and has probably worsened the problem.

In India’s case, America’s Orwellian phraseology has led to a demand for U.S. support against India-directed terrorism that originates in Pakistan. Indeed, one pillar of the new U.S.-India strategic relationship is that it provides India with leverage over the United States, which in turn is expected to pressure Pakistan. This has worked, but the whole structure has two critical weaknesses.

First, it means that New Delhi’s first phone call will be to Washington when there is another terrorist attack by Islamist extremists in India. Washington, in turn, may, or may not, put pressure on Pakistan (which will deny responsibility in any case). Absent an overall strategy for regional reconciliation or normalization, America’s fallback position is one of hope, and as George Schultz once said, hope is not a policy.

Second, New Delhi is now facing a critical turn in its own “war on terrorism.” Far more seriously afflicted than the United States, India has lost control over a quarter of its districts; in almost all cases these “terrorists” are not Islamists, but indigenous tribals, religious minorities, Maoists, and others, who are the product of a massive social “churning” that has produced greater expectations and greater frustrations, especially among the mal-educated young. A smaller phenomenon, but one even more chilling, is the growth of radical extremism among India’s Muslims, hitherto regarded as docile and satisfied. One of the great ironies here is that India refused to negotiate on Kashmir for fear that to do so would trigger unrest among the 150 million Muslims in India proper; today, both Kashmir and the fringes of this enormous community are in open rebellion.

Conclusion

U.S.-Indian strategic ties are undergoing rapid change. We will know more about the scope and depth of this change after Congress acts upon the proposed U.S.-India nuclear deal. India’s growing military competence, especially at sea, could be a special asset for the United States, just as its booming economy benefits American companies and (by and large) the Indian people.⁶ Optimism is in order, but only if it is tempered by prudence and a finer-grained understanding of regional pitfalls than America has shown in the past.

6. After a decade of growth and reform, India still has over half of the world’s poorest people.

“Economics” and Established Maritime Powers: Resource Implications of the New Maritime Strategy

Robert O. Work
Senior Defense Analyst
Center for Strategic and Budgetary Assessments

So it was back to the old, old naval question, first posed in American history by John Adams in 1775: “What think you of an American Fleet?” In other words, is the Navy necessary? Is it affordable? How should it be composed? For every naval nation, these are the unchanging questions of external and internal naval policy, the questions of need, function, and structure. The arguments have always been long; the answers have never been simple. In 1986, the US Navy had defined the purpose of its existence in terms which, by 1990, appeared to be out of date. *Knowing full well it was not going to be disestablished overnight, it understood that its role for the 1990s must be re-defined. If not, then undoubtedly, it would suffer greater proportional cuts than its sister—and rival—services.* [emphasis added]

Stephen Howarth
*To Shining Sea: A History of the United States Navy, 1775–1991*¹

The Navy has launched an impressive, multifaceted effort to redefine its role in a globalized world. A key aim of this effort will be to explain the increasingly important relationship between global economic growth and stability and maritime security.² However, as Stephen Howarth suggests, the project has two other important, if unstated, “economic” goals: to protect the Navy from future budget cuts and, if possible, to increase the level of resources dedicated to American naval power.

Others at this conference are far better qualified to discuss the first of these aims. This paper will address the second.

The Search for the New Naval Holy Grail

A decade and a half after the end of the Cold War, and after a century of defining itself first and foremost in terms of sea control and naval superiority, the U.S. Navy continues its relentless search for a new naval holy grail—a new *maritime grand strategy*. The last naval holy grail, the simply titled *Maritime Strategy*, was discovered in the early 1980s. It was unexpectedly shattered with the demise of the Soviet Union and its powerful navy. This surprising, disorienting event prompted the Navy to mount a concerted search for its replacement, which continues to this day.

-
1. Stephen Howarth, *To Shining Sea: A History of the United States Navy, 1775–1991* (New York: Random House, 1991), p. 556. This one-volume history is particularly valuable for two reasons: it is written by a British author, not an American, who provides an approving but distinctly outside view of the rise of the U.S. Navy to the position of number-one naval power in the world; and it ends just at the end of the Cold War, which began an as-yet-unending search for a “unified field theory” of naval power in the twenty-first-century.
 2. One has only to read the remarks made by Admiral Mike Mullen, Chief of Naval Operations, at the 2006 Current Strategy Forum to understand the importance he places on the intersection between economic stability and maritime security in a globalized world. See “Remarks as Delivered by Admiral Mullen to the Current Strategy Forum, Naval War College, Newport, Rhode Island, June 14, 2006,” accessed online at http://www.navy.mil/navydata/people/cno/Mullen/CNO_CSF140606.pdf on October 30, 2006.

To qualify as the new naval holy grail, the new maritime strategy must do three things at once: be embraced by and inspire those American fighting men and women who make their professional living by operating on, over, under, and from the sea; be understood and welcomed by U.S. political leaders and the American people, who will then seek and approve the funds necessary to translate into reality the sea services' preferred "needs, functions, and structure"; and be accepted, if not outright applauded and supported, by U.S. naval allies.³ Several promising strategies, stretching back to the 1991 *The Way Ahead*, have already been uncovered in the search for the new grail.⁴ However, they were found not to possess its three defining, miraculous powers and were subsequently discarded. Thus, the search for the new naval holy grail continues apace.⁵

Admiral Michael G. Mullen became the twenty-eighth Chief of Naval Operations (CNO) in July 2005. One year later, at the Current Strategy Forum in Newport, Rhode Island, he announced a change in search tactics for the grail. To sum up, Admiral Mullen seeks to "elevate the discussion of sea power" by instituting a five-phase process designed to gather inputs from internal and external experts, audiences, and sources, thereby sparking a competition of ideas. This competition of ideas deliberately seeks to encourage and include dissenting views. His desired end result is a framework "with which we can attempt to make sense of the world around us, the challenges we face, and the demands on our time and resources." This framework will, in essence, provide the map needed to find the Grail, ultimately leading to a completely new maritime grand strategy that aims "to address current challenges and to guide the Navy in an entirely new, globally connected environment that has not existed in the past."⁶

The methods and inclusiveness of Admiral Mullen's search for a new strategy have been well received by naval proponents both in and out of uniform. For example, Paul Bracken, in an article for the Institute of Defense and Strategic Studies, wrote:

The distinctive feature of the US Navy's new maritime strategy is that it did not start with the answer. In this, it is quite different from much strategic thinking in the United States in recent years. Instead of jumping to the right answer—"the global war on terror," "strategic balancer,"—it calls for a *productive conversation over the next year* to identify the concepts and issues that go into a maritime strategy. This marks a turning point in the style of American strategic thinking of giving

-
3. Sam Bateman, "Analyzing the New U.S. Maritime Strategy," Institute for Defense and Strategic Studies, August 11, 2006, accessed at <http://www.ntu.edu.sg/IDSS/publications/Perspective/IDSS0792006.pdf> on October 28, 2006. Mr. Bateman opined that any new maritime strategy would have to pass these three tests for it to be successful.
 4. For a wonderful recapitulation of U.S. Navy strategies that have failed to pass muster as the naval holy grail, see Dr. John B. Hattendorf, ed., *U.S. Naval Strategies in the 1990s: Selected Documents*, Naval War College Newport Papers, No. 27 (Newport, RI: Naval War College Press, September 2006). For a shorter discussion, see Peter M. Swartz, principal author, "U.S. Navy Capstone Strategies and Concepts (1970–2006)," a draft PowerPoint briefing prepared by the Center for Naval Analysis, dated May 17, 2005.
 5. The Navy has made it clear that no existing document can be updated or modified to qualify as the new grail. From "Developing a New Maritime Strategy," talking points developed by the Navy's director of information, undated.
 6. The embedded quotes come from Admiral Mike Mullen, U.S. Navy, "What I Believe: Eight Tenets That Guide My Vision For the 21st Century Navy," *Proceedings*, January 2006, accessed online at <http://www.navy.mil/navydata/cno/mullen/proceedingsjan06.html>, 28 October 2006. For a good description of the "competition of ideas" the Navy seeks, see the remarks made by Rear Admiral J. L. Shuford in "President's Forum," *Naval War College Review*, August 2006. The description of the new strategy development process is described in "Developing a New Maritime Strategy," CHINFO. As described in this document, the five phases of the process are as follows. Phase I: *Collect Inputs and Analyze Strategic Environment*; this begins the process and continues through all phases. Phase II: *Develop Maritime Strategies*; this involves the discussion of strategic theories in public forums to socialize initial concepts. Phase III: *Test, Examine and Refine Alternatives*; the Navy will legitimize and validate proposed strategies through the testing and gaming process and analysis of results. Phase IV: *Synthesize and Report*; the Navy will synthesize successful strategies into one comprehensive strategy. Phase V: *Sustainment*; the Navy will continue to promote and uphold principles of the Maritime Strategy.

instant answers with little attention to their risks or consequences . . . While the maritime strategy does not advance a single answer, it does offer promising avenues to explore. These involve technology and global alliances in a calculated relationship of large ends and means, the definition of grand strategy. [emphasis added]⁷

Few would argue that such a conversation would be unproductive; any deliberate, inclusive, and truly open dialogue about maritime strategy will be sure to yield positive results, even if they are nothing more than a restatement of the value of maritime power to the United States. However, it is not entirely clear what positive result the Navy most desires from its continued search for the new grail. The Navy and Marine Corps already have approved strategic visions—*Sea Power 21* and *The 21st Century Marine Corps*, respectively. Admiral Mullen has already announced the makeup of his desired 313-ship future battle fleet, as well as the 30-year plan to build it. The CNO and Commandant of the Marine Corps (CMC) also recently published a new Naval Operations Concept (NOC), which is described as “the latest in an evolutionary series that describes how the Navy–Marine Corps team will contribute to the defense of our nation.”⁸ In addition,

This document provides our “Commanders’ Intent” to guide the considerable creativity and judgment of our Sailors and Marines in applying a set of principles and methods within the framework provided by *Sea Power 21* and *The 21st Century Marine Corps*. The end-state is de-centralized decision-making and execution based on broad, centralized guidance.⁹

Vision. Force structure. Commanders’ intent. Operational guidance. It would be reasonable to assume that most of these things might normally spring from the very maritime grand strategy the Navy is searching for. One would at least expect that the future fleet size and architecture and the NOC would spring from an articulation of maritime grand strategy. Given that both already exist, what are the most important outcomes the Navy hopes to achieve through its continued search for the grail?

A Focus on Increased Prestige, Influence, and Resources

One desired outcome is surely to raise the level of discourse about sea power within the U.S. Navy and Marine Corps, and to inspire a new generation of naval leaders. In this regard, the CNO and CMC both appear to relish the prospect of intense debate and intellectual jousting within and between the two sea services. As they wrote in the NOC:

We understand that this discourse may become passionate. During World War II, Vice Admiral Richmond Kelly “Terrible” Turner and Lieutenant General Holland M. “Howlin’ Mad” Smith were renowned for their volcanic arguments about operational design, force organization, and tactics during the drive across the Central Pacific, yet together they formed an unbeatable team and wrote one of the greatest chapters in our history. . . . The Naval Service, and the nation, is well served when we follow their example of teamwork guided by open and frank discussion.¹⁰

Another outcome is to define sea power in a more inclusive way, specifically to excite and involve the greatest number of foreign naval allies; hence the CNO’s emphasis at the Current Strategy Forum on building naval partnerships in a globalized, interconnected world where “nobody can go it alone.” As indicated by his vision for a “1,000-ship Navy,” as well as other

7. Paul Bracken, “Maritime Strategy and Grand Strategy,” Institute for Defense and Strategic Studies, September 26, 2006, accessed at <http://www.ntu.edu.sg/idss/publications/Perspective/IDSS1032006.pdf> on October 27, 2006.

8. Admiral Michael G. Mullen, USN, and General Michael W. Hagee, USMC, *Naval Operations Concept, 2006*, p. 1, accessed at <http://www.mcvl.quantico.usmc.mil/concepts/ServiceConcepts/NOC%20FINAL%2014%20Sep.pdf>, on October 26, 2006.

9. Ibid., p. 1.

10. Ibid., p. 2.

new concepts such as the Global Fleet Station, the CNO is clearly intent on defining a new world of maritime partnerships and exploring new ways for cooperative naval action in every region of the world.¹¹

Both of these goals are admirable, and well worth the time and effort. Unquestionably, however, the Navy's search is also focused on exploiting the second of the grail's mystical powers: an ability to garner increased prestige, influence, and resources for the Department of the Navy. The important relationship between the Navy's strategy and resources was well captured by Samuel P. Huntington in an article titled "National Policy and the Transoceanic Navy," found in the May 1954 edition of the Naval Institute *Proceedings*:

The second element of a military service [the first being what he called the *strategic concept* of the service] is the resources, human and material, which are required to implement its strategic concept. To secure these resources it is necessary for society to forego the alternative uses to which the resources might be put and to acquiesce in their allocation to the military service. Thus, the resources which a service is able to obtain in a democratic society are a function of the *public support* of that service. The service has the responsibility to develop the necessary support, and it can only do so if it possesses a strategic concept which clearly formulates its relationship to the national security. [emphasis in the original]¹²

At the very least, then, Navy leaders hope a new strategy will favorably influence U.S. political leaders as they craft new national strategies and thereby protect the Navy from future budget cuts; at most, they hope it will be used by U.S. political leaders to articulate and justify an increased contributory role for the DoN in future national strategies, and a concomitant relative increase in the DoN's overall budget topline. These goals are at least partly acknowledged by the Navy's Director of Information, who has announced that the new strategy is to be published in 2007, in time "to influence the next cycle of strategic thinking, including the next Navy Strategic Plan and into the next [Quadrennial Defense Review]."¹³ Although there is no concrete mention of the Navy seeking increased resources, the implication is clear: Navy leaders hope not only to influence their own plans, but the course of future national defense plans, and, by extension, future funding streams.

This is by no means a subsidiary goal of the strategy. Protecting the DoN's budget line is absolutely critical if Admiral Mullen and the Navy have any hope of executing their plans. This explains why the CNO accompanied his announcement of a 313-ship future battle fleet target with a clear caution that achieving the target would require the Navy to make some dramatic adjustments. He decreed that the associated shipbuilding plan be built on the assumption of flat future defense budgets and DoN topline, thereby pointedly avoiding any hint that the execution of the Navy's plan would depend on an increased allocation of DoD resources. In other words, to build a 313-ship fleet, the Navy would need to reallocate money within its own expected resource stream.¹⁴

This will be no mean feat; the Navy's own analysts have calculated that building the 313-ship Navy will require yearly average shipbuilding budgets of approximately \$15.5 billion a year in Fiscal Year (FY) 2007 dollars (counting nuclear refueling costs). Outside agencies, such as the

11. "Remarks as delivered by Admiral Mike Mullen to the Current Strategy Forum, Naval War College, Newport, Rhode Island, June 14, 2006"; see especially p. 8.

12. Samuel P. Huntington, "National Policy and the Transoceanic Navy," *United States Naval Institute Proceedings*, May 1954, p. 483.

13. "Developing a New Maritime Strategy."

14. See, for example, Captain J. F. McCarthy, USN, "Recapitalizing the Navy's Battle Line," a PowerPoint presentation given to at a Department of the Navy Media Roundtable on June 8, 2006, slide number 16.

Congressional Budget Office, put the cost much higher, at over \$21 billion a year.¹⁵ Even if its lower numbers prove to be correct, however, the Navy will still need approximately \$4.4 billion more per year in average shipbuilding funds than the Congress appropriated over the previous 20 years.¹⁶ In order to free up that much additional money within its own topline, the Navy will need to do the following:

- *Limit real increases in personnel costs.* The average yearly costs for active-duty personnel have long risen at rates higher than those for the overall Navy budget. To keep the amount of money spent on personnel flat (adjusted only for inflation), Admiral Mullen plans to continue the aggressive reduction in the Navy's overall active-duty end strength started by Admiral Clark. In effect, he intends to offset any real increases in personnel costs by reducing the number of people serving on active duty.
- *Limit real increases in operations and maintenance (O&M) costs.* Navy operations and maintenance costs have also been steadily increasing as a share of Navy topline. The shipbuilding plan depends on these costs being frozen at current levels, and then rising only enough to keep pace with inflation.
- *Reduce research and development (R&D) costs and keep them low.* In line with his predecessor's thinking, Admiral Mullen intends to shift money from R&D toward ship production, and to keep future R&D at much lower levels than in the recent past.
- *Prevent requirement and cost growth in any Navy shipbuilding program.* To accomplish this, the CNO resuscitated the moribund Ship Characteristics and Improvement Board to reinstitute a more vigorous scrub of future ship requirements and identify unnecessary requirements in existing programs. He also instituted stringent cost controls.
- *"Fence" shipbuilding funds.* The CNO decreed that maintaining stability in the yearly shipbuilding budgets and construction rates would be among his top procurement priorities. While stating that he intends to better balance the Navy's investment portfolio, protecting the shipbuilding fund from cuts implies that should procurement funding be lower than expected, aviation and other programs would be among his first targets for adjustments.

Achieving any of these goals will present a stiff challenge, primarily because they each depend to some degree on factors outside of the Navy's direct control. As just one example, if the Congress authorizes more research and development money than the Navy requested—as they did in the FY 2007 budget just passed—the Navy will be obliged to pay for it, which will upset its carefully calibrated budget and shipbuilding plans. As a result, the chance that all of these objectives will or can be met simultaneously is extremely remote.¹⁷ Moreover, there is always the possibility that internal savings generated within the Department of the Navy will be diverted to other, more pressing DoD priorities. In other words, even if the Navy is successful in holding down spending in one area of its budget, there is no guarantee that the savings can or will be applied to other DoN programs.

15. *Options for the Navy's Future Fleet* (Washington, D.C.: Congressional Budget Office, May 2006), pp. 25–26. The report can be found online at <http://www.cbo.gov/ftpdocs/72xx/doc7232/05-31-Navy.pdf>.

16. McCarthy, "Recapitalizing the Navy's Battle Line," slide number 18.

17. For example, DFI International Corporate Services recently concluded that "pressures will prevent a wide range of acquisition programs from unfolding as the Navy and DoD desire." See DFI International Corporate Services, "Navy Investment Plans: Plans Versus Reality, and Implications for Market Opportunity," a PowerPoint presentation given to the National Defense Industrial Association, April 26, 2006.

This makes it all the more important that, at the very least, the Navy be resourced at planned budget levels. Far better would be if the Navy was to receive additional resources. Obviously, having to contend with budgets that are smaller than forecast will make an already-difficult planning problem even tougher, while getting more resources than expected will provide a hedge against unexpected budget shocks and increase the likelihood the CNO will be able to build his preferred future fleet. Developing a maritime grand strategy that garners increased influence, prestige, and resources for the Navy is therefore an important, if not overriding, institutional goal.

Benchmarks for the Future Grail

Indeed, the emphasis placed on this goal is implicitly revealed by two earlier strategies that served, for a time, as the naval holy grail. Not surprisingly, both are frequently cited by Navy officers in discussions about the effects the new maritime strategy is expected to achieve. In effect, they serve as the benchmarks for the new grail. They are as follows:

- The strategy of commercial and military sea control, articulated first in Alfred Thayer Mahan's *The Influence of Seapower on History*. Mahan's masterwork, published in 1890, figuratively lit the fuse that fired the U.S. Navy along a 55-year trajectory that took it from being one among many competitors in the global naval race to being the unchallenged world naval power. As Admiral Mullen said in his remarks at the Current Strategy Forum, Mahan "...was perhaps the first to truly advance the discussion of sea power. This new maritime strategy will elevate it far above anything he could have envisioned in his day."¹⁸
- The aforementioned *Maritime Strategy*, developed in the early 1980s under the leadership of then-secretary of the Navy John Lehman. *The Maritime Strategy* was the modern reincarnation and expansion of Mahan's thinking about the importance of sea control, with a twist of transoceanic power projection. It clearly defined the purpose of naval forces in a potential war against the Soviet Union, and provided the strategic rationale for the subsequent development of the "600-ship Navy." As Admiral Mullen approvingly remarked at the Current Strategy Forum, "It was a strategy for—and of—its time and it worked, prevailing across presidential administrations, Chiefs of Naval Operations and varying budget cycles."¹⁹

These two examples have five things in common, which provide important clues about the Navy's hopes for the new strategy. First, *both strategies were preceded by dramatic contractions in the size of the U.S. battle fleet*. Between 1865 (the end of the American Civil War) and 1888, the American battle fleet fell from nearly 700 commissioned ships to only 43.²⁰ Eight decades later, between 1968 and 1978, the active fleet dropped from 932 to 531 ships as many World War II vessels reached the end of their productive service lives. During this post-Vietnam drawdown, every component of the battle fleet was affected: the number of carriers dropped from 23 to 13; the number of cruisers fell from 35 to 28; amphibious warships were cut from 157 to 67; submarines from 105 to 75; and destroyers from 219 to 95.²¹ Worse, in 1978,

18. Remarks delivered by Admiral Mike Mullen to the Current Strategy Forum, Naval War College, Newport, Rhode Island, June 14, 2006, p. 8.

19. *Ibid.*, p. 3.

20. Peter M. Swartz, *Sea Changes: Transforming U.S. Navy Deployment Strategy, 1775–2002* (Alexandria, VA: Center for Naval Analysis, July 31, 2002), pp. 26–27; Naval Historical Center, "U.S. Navy Active Ship Force Levels, 1886–1916," accessed online at <http://www.history.navy.mil/branches/org9-4b.htm#1886> on October 29, 2006.

21. Naval Historical Center, "US Navy Active Ship Force Levels, 1917–," accessed online at <http://www.history.navy.mil/branches/org9-4.htm#1945> on October 29, 2006.

President Jimmy Carter announced his alterations to the five-year shipbuilding plan submitted by his predecessor, President Gerald Ford, cutting the number of ships in the 1979 to 1984 shipbuilding plan from 156 to 70.²²

These numbers tell an important story: in the two periods running up to the articulation of the new strategies, the Navy's relevance to prevailing national security policies was questioned. As a result, naval leaders had a hard time justifying the budget resources necessary to sustain the battle fleet.

Second, both strategies *were published during periods of intense naval competition, when the United States' relative position among world naval powers was either low or directly threatened*. Between 1865 and 1884, the U.S. Navy dropped from being number 2 among world naval powers to number 12. In addition to a dramatic reduction in its fleet size, the Navy also lagged in technological innovation, largely eschewing steam propulsion, iron armor, or rifled cannon in new warship construction. In a world in which the armored battleship was rapidly becoming the primary measure of naval power, the small, U.S. frigate/cruiser-centric battle fleet "was quite inadequate to carry out its planned wartime employment strategy of coastal defense and commerce raiding, let alone take on a concentrated naval battle fleet."²³ As the U.S. political leadership began to look beyond America's continental borders, U.S. weakness in the global maritime competition became a big national security issue.

Nearly a century later, even as the U.S. battle fleet continued its precipitous decline, the Soviet Navy, under the energetic leadership of Fleet Admiral Sergei Gorshkov, was making a strong bid for the number 1 spot in the global naval pecking order.²⁴ Indeed, Admiral Elmo Zumwalt, CNO from 1970–74, concluded that in any year after 1970, the U.S. Navy would likely come out the loser in a confrontation with the Soviet Navy, with only a 35 percent chance of victory.²⁵

In other words, both strategies were developed during periods when the Navy's rank and file was dispirited by its service's national security role and its confidence in its warfighting abilities was at a low point.

Third, and most importantly, *both strategies helped to trigger or justify dramatic increases in the level of national resources devoted to the Navy, and in the size and capabilities of the U.S. battle fleet*. Mahan's writings helped to convince the U.S. political leadership that the United States needed a navy that could compete against the world's best—to enforce the Monroe Doctrine, to protect its shores from foreign invasion, or to protect U.S. economic interests and maintain access to world markets. Indeed, these writings helped to shape the first naval holy grail and were instrumental in providing the impetus and rationale behind the building of a "New Navy" that was better able to compete in the global naval competition.²⁶

22. Howarth, *To Shining Sea: A History of the United States Navy, 1775–1991*, pp. 532–33.

23. Swartz, *Sea Changes: Transforming U.S. Navy Deployment Strategy, 1775–2002*, p. 27.

24. For example, see Dr. Donald Chipman, "Admiral Gorshkov and the Soviet Navy," *Air University Review*, July–August 1982, accessed online at <http://www.airpower.maxwell.af.mil/airchronicles/aureview/1982/jul-aug/chipman.html> on October 30, 2006.

25. Howarth, *To Shining Sea: A History of the United States Navy, 1775–1991*, p. 531.

26. As described by one noted naval historian, "At the end of the nineteenth century, in the interval between the Anglo-German-American crisis over Samoa and the Spanish-American War, the Congress reshaped the navy to meet new national goals. Having rounded out its continental borders, the United States was seeking...a place of equality with the greatest navies of Europe." See Kenneth J. Hagan, *This People's Navy: The Making of American Sea Power* (New York: Free Press, 1991), p. 389. This radical transformation of the U.S. battle force from a frigate force focused on commerce raiding to a battleship force focused on the destruction of an opposing battle line is often referred to as the building of the "New Navy." See Howarth, *To Shining Sea: A History of the United States Navy, 1775–1991*, pp. 231–34.

The results of this nationally sanctioned effort were quite impressive. In 1890, the year Mahan published *The Influence of Seapower on History*, the battle fleet numbered 42 ships, with no battleships; it was number 12 among world naval powers. By 1900, the United States was number 6 with a battle fleet, with 140 battle force ships and eight battleships, and many more ships under construction.²⁷ In 1901, 60 ships of all classes were on the way, and the \$78 million appropriations bill passed in the fall of that year was the largest appropriation in U.S. peacetime history.²⁸ In 1905, courtesy of the Imperial Japanese Navy's crushing defeat of the Russian navy, the U.S. Navy, with 174 active ships and 12 battleships, rose to number 5 among the world's navies, behind those of Britain, France, Germany, and Italy. The delivery of no less than 13 battleships and armored cruisers in 1907, followed by six more in 1908, increased the size of the fleet to 181 ships, including 25 battleships, and vaulted the U.S. Navy to the number 2 spot, behind only the Royal Navy. From that point on, the U.S. battle fleet never fell below third among the world's naval powers.²⁹

Although perhaps not as large in terms of absolute numbers, the *Maritime Strategy* helped spark a similarly impressive fleet buildup and modernization program during the 1980s. By 1981, the battle fleet had fallen to its post-Vietnam War low of 521 ships.³⁰ On the day he was sworn in as the secretary of the Navy in February 1981, John Lehman asserted that the battle fleet should be composed of no less than 600 modern warships, including 15 carrier battle groups, four surface battle groups built around recommissioned and modernized World War II battleships, and 100 nuclear attack submarines. Later, during the 1981 Current Strategy Forum, Secretary Lehman hailed the return of naval strategy and promised that by 1990 the United States should and would have "outright naval superiority over any power or powers that might attempt to prevent our free use of the seas and the maintenance of our vital interests worldwide."³¹ This was music to the ears of naval advocates, who had been demoralized by the subsidiary wartime convoy escort role envisioned for the Navy by the Carter administration.

The *Maritime Strategy* embodied Secretary Lehman's bold vision and thus became the new naval holy grail. It was accepted as the maritime component of the national military strategy, explaining how the battle fleet would actually be used in war against the Soviet Union, not just the Soviet navy. It described the benefits of "horizontal escalation" and forward offensive operations around the periphery of the Soviet empire. It showed how all U.S. and allied naval forces might play in this global campaign. It also reinvigorated the Navy, spurring debates and intellectual foment, and focusing fleet exercises, war games, operational experimentation, and battle tactics.³² It also was used to justify every component of the "600-ship Navy." Although the fleet ultimately reached a high of 594 ships, six short of Secretary Lehman's stated goal, it was a far more capable fleet, with new systems such as the Aegis and New Threat Upgrade anti-air warfare combat systems; the SQQ-89 digital antisubmarine warfare combat system and Light Airborne Multipurpose System; the Mk-41 vertical launch (missile) system; and new weapons such as SM-2 surface-to-air missiles, the *Harpoon* antiship cruise missile, and the *Tomahawk* land attack missile.

The Navy now plans for a future battle fleet of 313 ships, 33 more vessels than the 280 warships now in commission. This planned fleet expansion of 12 percent is very similar to the 15 percent

27. Naval Historical Center, "U.S. Navy Active Ship Force Levels, 1886–1916."

28. Hagan, *This People's Navy*, p. 232.

29. Naval Historical Center, "U.S. Navy Active Ship Force Levels, 1886–1916." The U.S. Navy gave up the number-two spot to the German navy for a short time before World War I. See Howarth, *To Shining Sea: A History of the United States Navy, 1775–1991*, p. 295–96.

30. Naval Historical Center, "U.S. Navy Active Ship Force Levels, 1917–."

31. Howarth, *To Shining Sea: A History of the United States Navy, 1775–1991*, p. 537; see also the remarks delivered by Admiral Mike Mullen to the Current Strategy Forum, Naval War College, Newport, Rhode Island, June 14, 2006.

32. Swartz, "U.S. Navy Capstone Strategies and Concepts (1970–2006)," slides 75–94.

fleet expansion planned for in the 1980s. Indeed, the current circumstances are also similar to those in the early 1980s in that in both instances the size of the future fleet was known *before* the development of their associated strategies. This provides further evidence that the Navy sees the strategy's primary role as securing the resources necessary to build its desired fleet rather than illuminating the character of the fleet it should build.

Fourth, *because the two strategies were developed during times when there was a clearly defined naval threat, their implementation plans could be sharp and focused.* Imbued with the spirit of Mahan's holy grail, which held "that the true mission of a navy was acquiring command of the sea through the destruction of an enemy fleet,"³³ and faced by a world in which there were many potential naval adversaries, DoN plans to build a New Navy capable of executing a sea control strategy could be carefully focused. All new-construction ships were rationalized and designed for one mission: to take on and beat the best battle lines in the world, regardless of which nation operated them. New Navy ships were defined first and foremost by their relationship and contributions to the actions of the battle fleet's growing armored battle line.

From 1890 up through the end of World War I, the only difference in Navy war plans was the foreign navy or combination of navies the U.S. battle line might have to fight, as forecast in a series of famous "color plans" developed by U.S. strategists and planners in the early twentieth century. After the First World War, however, U.S. Navy war planning became even more focused. By the early 1920s, the number of likely naval adversaries had shrunk to one—the Imperial Japanese Navy. As a consequence, Plan Orange, the war plan to confront and defeat the Japanese, became the sole focus of Navy war planning. The subsequent results spoke for themselves: after nearly two decades of war gaming and planning, the World War II Pacific campaign offered few surprises to Navy officers. As Fleet Admiral Chester Nimitz famously remarked after World War II, the only thing that took the fleet off-guard during its long struggle across the Pacific was the appearance of *kamikazes*.³⁴

The Navy's plans in the late 1970s and early 1980s benefited from a similar ability to focus on a single enemy. At that time, the Soviet navy posed the only credible threat to U.S. naval supremacy. As mentioned earlier, every battle force vessel in the *Maritime Strategy*'s "600-ship Navy" could therefore be justified by its contributions in a prospective war with the Soviet Union, be it serving as part of the Navy's strategic deterrent force, the nuclear attack submarine force, a carrier battle group, a battleship surface action group, an amphibious task force, a trans-Atlantic convoy, or an underway replenishment group.³⁵ Additionally, the distinction between the *Maritime Strategy* and the Navy's war plans against the Soviet Union was quite narrow. In fact, the strategy in many ways played the role of a modern-day Plan Orange. Like that earlier plan, the *Maritime Strategy* served to focus fleet exercises, war games, research and development, the selection of new weapons, and, just as importantly, the intellectual discourse inside the Navy.³⁶

In these two cases, when naval planners were confronted by clear naval threats, two implicit assumptions helped shape the implementation plans that derived from the strategies: first, the fundamental task of naval leadership was to concentrate its efforts on building a battle fleet capable of defeating the most likely enemy fleet; and second, that this fleet would handle all subsidiary naval tasks. One practical result was that spending money on special-purpose ships that did not contribute to the singular goal of defeating an enemy navy was generally regarded as a waste of resources. Said another way, naval tasks such as peacetime forward presence,

33. Huntington, "National Policy and the Transoceanic Navy," p. 487.

34. See Rear Admiral J. L. Shuford, "The Naval War College's Twin Mission," in "President's Forum," *Naval War College Review*, Summer 2005.

35. See, for example, the cruiser and destroyer force-level objectives for the "600-ship Navy" in Norman Polmar, *Ships and Aircraft of the U.S. Fleet*, 14th edition (Annapolis, MD: Naval Institute Press, 1987), p. 110.

36. Swartz, "U.S. Navy Capstone Strategies and Concepts (1970–2006)," slides 75–94.

humanitarian assistance, or crisis response were generally considered “lesser included” uses or tasks for the main battle fleet.³⁷

Finally, *both examples shared an important commonality in their development, in that both strategies were preceded by indirect attacks against the direction of national strategies and plans—and especially against the prevailing view about the Navy’s role in pursuing national security policy objectives.* These indirect attacks took the form of “conversations” between naval leaders and the political elites and the American people. This approach was approvingly laid out by Samuel P. Huntington in the aforementioned article, “National Policy and the Transoceanic Navy.” In the year this article was published (1954), the fleet had fallen from its World War II high of 6,768 ships to “only” 1,113 ships. Although this was a substantial increase over the post-war low of 634 ships, reached just before the invasion of South Korea, the Eisenhower administration’s evolving New Look defense program, based on the idea of massive retaliation, favored the expansion of long-range aerospace power over the expansion of the battle fleet.³⁸

Huntington’s article was thus published at a time when the U.S. Air Force was receiving the lion’s share of Department of Defense resources. To redress the situation, Huntington prodded the Navy’s leadership to more effectively explain its “strategic concept” and relevance to post-World War II national policy to the American people “through a systematic, detailed elaboration and presentation of the theory of the transoceanic Navy against the broad background of naval history and naval technology.” The article’s implicit message was that if the Navy did not or could not explain its ongoing shift away from the Mahanian strategy of sea control and toward transoceanic power projection on the Eurasian supercontinent, it would continue to lose in the defense resources battle.³⁹

Huntington’s approach, or one very close to it, is widely believed by naval proponents to have been instrumental in changing the Navy’s fortunes—in laying the foundation for the success enjoyed by both the strategy of sea control outlined in Mahan’s *Influence of Seapower on History* and the *Maritime Strategy* in gaining increased resources for the battle fleet. For example, in an insightful article written in the *Naval War College Review* in 1997, titled “Mahan’s Forebears: The Debate Over Maritime Strategy, 1868–1883,” Benjamin Apt wrote:

Between 1868 and 1883, a number of American naval officers of various ranks, lamenting their service’s decline, began to promote advanced military ship designs and equipment through organized publicity. They wrote articles, held lectures, and formed organizations that eventually helped to persuade Congress and the Department of the Navy to re-create the fleet. When the Navy did begin its restructuring in the early 1880s, the warships it ordered derived much from the ideas of these advocates of modernization.

The writings of the would-be naval reformers in the 1870s can be described as a “conversation,” one in which they praised, debated, and built upon one another’s arguments and tracked the

37. This helps to explain why the contemporary Navy, still equipped with vessels designed to fight the Soviet Union, is now forced to use guided missile cruisers with 400-man crews for counterpiracy patrols off the coast of Africa. Even the exception proved the rule: during the 1920s and 30s, the Yangtze River Patrol, the Asiatic Fleet, the Caribbean Banana Fleet, and periodic naval deployments to European waters were generally equipped with and accomplished by obsolete ships that no longer contributed to planned fleet warfighting operations. See Bernard D. Cole, “The Interwar Forward Intervention Forces: The Asiatic Fleet, the Banana Fleet, and the European Squadrons: The Battle Fleet Trains While the Gunboats Fight,” a paper prepared for the U.S. Navy Forward Presence Bicentennial Symposium, June 21, 2001.

38. Naval Historical Center, “U.S. Navy Active Ship Force Levels, 1917–,” accessed online at <http://www.history.navy.mil/branches/org9-4.htm#1945> on October 29, 2006. For a discussion of the impact of Eisenhower’s New Look, see Herman S. Wolk, “The New Look,” *Air Force Magazine Online*, accessed at <http://www.afa.org/magazine/Aug2003/0803look.asp> on November 1, 2006.

39. Huntington, “National Policy and the Transoceanic Navy,” p. 493.

extraordinary contemporary pace of naval science . . . Interest in technology was a leading impetus behind those who sought an enlarged U.S. Navy following the Civil War.

A further motivation of the reformers was a correlative of their desire for an aggressive application of technology. They became exponents of an internationalist, ultimately imperialist, vision of America's role in world politics . . . Before the Civil War, U.S. overseas shipping had sailed in the safety afforded by British control of the Atlantic and the Pacific oceans. This arrangement had suited both countries. England's policy was to retain unrivaled military dominance of the seas, which in turn had spared the United States the expensive construction and training of an ocean-going navy.

In the postbellum years, American naval reformers no longer assumed this division of roles. They foretold a United States that would be more competitive with the mother country, as well as with the European powers that were then expanding their own navies. But if the reformers doubted that Britain could continue to preserve its predominance, there is no suggestion of it in their central writings. What is evident, rather, is that the navalists simply wanted a more powerful navy, saw the means for developing it, and rationalized why the country would need one.⁴⁰

Conducting a conversation with the nation's political leadership and the American people, during which the Navy attempted to make the case for a more powerful fleet, also played an important advance role for the *Maritime Strategy*. In 1979, U.S. naval leaders responded to President Carter's aforementioned shipbuilding cuts with *The Future of U.S. Sea Power*. The explicit purpose of the document was to elevate debates on the Navy's budget to the strategic level, influence national military strategy, and influence perceptions about the U.S. Navy held by both the U.S. political leadership and the Soviets. Its powerful, clear, and simple messages about the importance of sea power and the role of the U.S. Navy in any conflict against the Soviet Union were repeated by the CNO and naval officers in defense symposia, public forums, and before Congress; were reinforced by fleet exercises; and shaped the play at the Global War Games held annually at the Naval War College.⁴¹

By describing the search tactics for the new naval holy grail in terms of having productive conversations or conversations with the American people, naval proponents thus appear to be implicitly signaling that they believe the time has come to explain more forcefully the Navy's role in future defense strategies and policies, and possibly to argue for an expanded role. By doing so, they would naturally hope to influence the "next cycle of strategic thinking" and, indirectly, to increase the level of national resources devoted to building the future fleet.

To sum up, then, the two models that the Navy is using to gauge the ultimate success of the new maritime grand strategy—and to determine whether or not the new strategy warrants the title as the new naval holy grail—are strategies that were formulated when the Navy was down. Both were developed after times when the fleet had contracted, and when a dispirited Navy rank and file sought a more central, relevant contributory role in national defense policies and strategies. Both were preceded by direct conversations with the American public, which were subsequently credited with helping to reverse the Navy's fortunes and garnering increased prestige, influence, and resources for the service. Finally, because they were developed in times of a clear and compelling threat, the plans to execute the strategies could be sharply focused.

Said another way, the two guiding strategies had an important institutional "economic" impact: they helped to spur an upturn in the value of the Navy's stock in national defense policies and strategies. As a result, the strategies made all those holding the stock richer—and happier and more productive.

40. Benjamin Apt, "Mahan's Forebears: The Debate Over Maritime Strategy, 1868–1883," *Naval War College Review*, Summer 1997, accessed online at <http://www.nwc.navy.mil/press/review/1997/summerart5su97.htm> on October 27, 2006.

41. Swartz, "U.S. Navy Capstone Strategies and Concepts (1970–2006)," slides 65–72.

The Right Models?

The Navy's desire to seek increased prestige, influence, and resources is natural, and a reflection of its fervent belief in the importance of a strong American navy. However, before restarting a renewed search for the naval holy grail, one has to ask a single, critical question: are these two previous strategies—not to mention Huntington's approach for taking the question of the Navy's relevance directly to the American people—the right models for establishing the new search pattern for a naval maritime grand strategy? Perhaps not, for several reasons.

First, the only similarity between current circumstances and those that led to the strategy of sea control and the New Navy, and the *Maritime Strategy* and the "600-ship Navy" is that the contemporary battle fleet is the end result of a dramatic decade-and-a-half drawdown. In 1987, the battle fleet numbered 594 ships.⁴² On September 30, 2006, after a steady two-decade-long decline, the U.S. battle fleet numbered 280 ships—representing a hefty 53 percent reduction in commissioned battle force ships.

That is where the similarities end. No naval challenger now threatens the U.S. Navy; even after its substantial decline in numbers the U.S. battle fleet remains unchallenged atop the global naval pecking order. Although the battle fleet numbers fewer ships than at any time since 1931, the Navy likely enjoys a wider margin of naval superiority than at any point since the late 1940s.⁴³ Why? Because while the U.S. fleet is smaller than at any time in over 70 years, so too are the rest of the world's navies. No foreign navy comes close to operating the total number of major warships now found in the U.S. battle fleet. The U.S. Navy operates 12 of the world's 15 full-deck aircraft carriers; it operates approximately twice as many nuclear-powered attack submarines as the rest of the world combined; its 71 major surface combatants have a cumulative missile magazine capacity greater than that of the 366 major surface combatants in the next 17 largest navies; its amphibious fleet is far more capable than any other comparable fleet, and its combat logistics forces are the largest in the world.

A simple comparison of aggregate fleet warship tonnages helps to highlight the great disparity between the U.S. Navy and foreign navies in terms of combat capability and capacity. As naval analyst Geoffrey Till explains, "[t]here is a rough correlation between the ambitions of a navy and the size and individual fighting capacity of its main units, provided they are properly maintained and manned."⁴⁴ Aggregate fleet warship tonnage can therefore be used as a simple proxy for a navy's overall fighting capabilities and to help identify the key competitors now in the global naval competition.⁴⁵

The comparisons of fleet aggregate tonnages are quite stunning. The U.S. battle fleet alone, composed of modern, large, and commodious warships, comes in at an aggregate displacement of 2.85 million tons. In contrast, only seven other countries operate war fleets that displace more than 100,000 aggregate tons, and 10 more operate fleets that displace between 50,000 and 100,000 tons. In other words, at this point in time, the U.S. Navy faces 17 credible competitors in the global naval race. In order of aggregate tonnage, these competitors are Russia, Japan, the United Kingdom, the People's Republic of China (PRC), India, France, Taiwan,

42. By comparing ship levels in Naval Historical Center, "U.S. Navy Active Ship Force Levels, 1917–."

43. See, for example, A. D. Baker III, "World Navies Are in Decline," *Proceedings*, March 2004, pp. 32–49.

44. Geoffrey Till, "Can Small Navies Stay Afloat?" *Jane's Navy International*, May 1, 2003.

45. For the purposes of the following comparison, the following types of warships are included: aviation power-projection platforms (ships that can support fixed-wing and/or vertical take-off and landing (VTOL) or short take-off and vertical landing (STOVL) tactical aircraft); surface combatants with a full load displacement (FLD) greater than 2,000 tons (considered capable of overseas deployment); and submarines with submerged displacements greater than 450 tons (i.e., a German *Type 205* coastal defense submarine equivalent). Data is based on fleets in commission on January 1, 2005.

Turkey, Brazil, Canada, Spain, Italy, Germany, Australia, South Korea, Greece, and the Netherlands. Together, the navies of these 17 countries account for 2.66 million tons of the entire rest of the world's (ROW) aggregate warship displacement of 3.03 million tons (88 percent).

At the height of its naval dominance, England strove to achieve at least a "two-navy standard." That is, British naval planners aimed to maintain a navy that was as large as the combined fleets of the closest two naval powers. In terms of aggregate warship tonnage, then, the United States enjoys a "17-navy standard." Indeed, at 94 percent of the total aggregate ROW tonnage, *the U.S. war fleet displaces nearly as much as all other warships in the world's navies, combined.*

Moreover, a quick scan of the competitors reveals that 14 of the 17 navies are from countries allied with or friendly to the United States, and the fifteenth is from a country we now count as a "strategic partner" (India).⁴⁶ Only two of the 17 countries are considered *potential* naval competitors: Russia and the People's Republic of China. The Russian navy—assuming all of its ships are 100 percent operationally capable (a highly questionable assumption)—comes in at 630,628 tons, while the Chinese People's Liberation Army Navy (PLAN) totals 263,064 tons. This means the DoN Battle Force out-displaces the combined fleets of its two biggest potential naval competitors by over three to one. Given these circumstances, there is simply no way that Navy leaders can reasonably justify a major expansion in the size of the battle fleet in terms of a credible threat to U.S. naval global superiority.

The Navy would be equally hard-pressed to make a strong case that the service is in imminent danger of losing its daunting lead. The Department of the Navy, with a yearly budget topline of approximately \$125 billion dollars, receives 2.6 times more money than Great Britain's *entire military*, and twice as much as the combined defense budget expenditures of both Russia and China.⁴⁷ Most naval analysts believe that, barring a major change in defense spending, neither Russia nor China will likely be able to mount a credible naval threat for at least two decades. As A. D. Baker III, long-time editor of *Combat Fleets of the World*, wrote:

. . . the US Navy remains by a vast gap the world's most powerful, and . . . has been steadily increasing its margin of power over any possible protagonist—or even groups of protagonists . . . [T]he Navy's fleet is essentially unchallengeable, and its aircraft inventory is far larger than that of any foreign nation's air forces, land- or sea-based. From the standpoint of military technology, there is simply no other nation with the same naval capabilities, and it appears that no challenger will be likely to appear for two to three decades⁴⁸

Robbed of any justification to argue for a larger fleet in terms of diminishing fleet capacity or a U.S. drop in the relative global naval standings, Navy leaders will also find it hard to argue that they are being unfairly penalized in the overall allocation of the nation's resources devoted to national defense. Since the end of the Cold War, the Department of the Navy has consistently received a slightly higher percentage of the overall defense budget than either the Department of the Air Force or the Department of the Army, except in years when the Army was heavily

46. As former secretary of state Henry Kissinger recently said, "Now India is, in effect, a strategic partner, not because of compatible domestic structures but because of parallel security interests in Southwest Asia and the Indian ocean, and vis-à-vis radical Islam." Henry A. Kissinger, "Implementing Bush's Vision," *Washington Post*, May 16, 2005, p. A17. See also Michael Sirak, "U.S. Signs Defense Pact with India," *Jane's Defense Weekly*, July 13, 2005, p. 15; and Michael Barone, "An Emerging Alliance with India," *Jewish World Review*, July 5, 2005, found at <http://www.JewishWorldReview.com>.

47. These comparisons are drawn from "Largest Military Expenditures, 2005," compiled by the Stockholm International Peace Research Institute, accessed online at <http://www.infoplease.com/ipa/A0904504.html> on October 29, 2006. Many would argue, however, the true level of defense expenditures in these two countries, particularly China.

48. A. D. Baker III, *Combat Fleets of the World 1997–1998* (Annapolis, MD: Naval Institute Press, 1998), p. xiv.

committed in combat operations.⁴⁹ Simply put, they have little to complain about. This would make it difficult for naval proponents to justify a large internal shift of DoD resources to the Navy.

Under any circumstances, such an argument would be unlikely to gain traction given the way defense expenditures are now allocated among the three departments. As implied by Huntington, between 1783 and 1954 U.S. peacetime expenditures on defense were based on a dominant service model. To save money in peacetime, defense resources were allocated to the service most clearly aligned with U.S. national security policy; only in time of war would all services be fully funded. As a result, up through 1890, when the primary threats to the Republic were on the North American continent, the dominant service was the Army, and it was the focus of most peacetime defense expenditures. Between 1890 and the start of World War II, when threats were perceived as originating across the ocean, the Navy was the dominant service, and it received the bulk of peacetime defense allocations. Between 1947 and 1954, when nuclear deterrence and preparing for nuclear warfighting was the dominant national security focus, the U.S. Air Force was the dominant service, and it was the benefactor of most peacetime expenditures.⁵⁰ However, Huntington himself recognized that DoD was beginning to turn away from this model. As he then wrote:

Perhaps the first necessity of the Navy . . . is for it to recognize that it is no longer the premier service but is one of three equal services all of which are essential to the implementation of American Cold War policy. The second necessity is for the Navy to insist, however, upon this equal role.⁵¹

Huntington's words were prescient. In 1961, the new Kennedy administration adopted the Strategy of Flexible Response. Among other things, this strategy called for the Department of Defense to develop a balanced portfolio of land, air, sea, space, and special operations capabilities, and it was the official death knell to the dominant-service peacetime budget allocation model.⁵² Indeed, since the subsequent introduction of the DoD Planning, Programming, and Budgeting System (PPBS) in the early 1960s, each of the three departments has received roughly the same share of the defense budget pie, and changes to their allocations have been mostly on the margins. If anything, this "1/3-1/3-1/3" budget split became even more entrenched with the 1986 passage of the Goldwater-Nichols Act, which mandated an increased emphasis on interdependent joint operations; since 1990, the variation in defense budget shares allocated to the three departments has been minuscule.⁵³

Navy planners are understandably wary of the Army's recent very public attempt to garner increased resources due to the stresses associated with a hard, four-year-long war in Afghanistan and Iraq. In August 2007, the Army adopted Huntington's approach to the extreme, refusing to submit what they claimed would be a broken program if held to the administration's budget guidance. The Army's chief of staff, with the apparent approval of the secretary of defense, pressed the President's Office of Management and Budget (OMB) for nearly \$139 billion in FY 2008, some \$25 billion more than the amount originally earmarked for the Army. As observed by one national news magazine, this budget increase is double the government's annual spending for customs, immigration, and border protection combined.⁵⁴

49. See Table 6, "Department of Defense Budget by Service," in Steve Kosiak, *Analysis of the FY 2007 Defense Budget Request* (Washington, D.C.: Center for Strategic and Budgetary Assessments, April 2006).

50. See Huntington, "National Policy and the Transoceanic Navy," pp. 483–93.

51. Huntington, "National Policy and the Transoceanic Navy," p. 493.

52. See Caryn E. Neumann, "Kennedy Administration (1961–63), National Security Policy, accessed online at <http://www.espionageinfo.com/Int-Ke/Kennedy-Administration-1961-1963-United-States-National-Security-Policy.html> on November 1, 2006.

53. Table 6, "Department of Defense Budget by Service."

54. "The Third Battlefield: Money," *U.S. News and World Report*, October 30, 2006.

Although the chief of staff of the Army made it clear that he did not want the extra money to come at the expense of either the departments of the Navy or the Air Force, Navy and Air Force leaders held their collective breaths. They watched to see how much money the Army would get from its brazen tactics, and whether OMB would increase the overall DoD budget topline, as the Army suggested, or order the DoD to handle the problem by reallocating money within its own topline. In the end, OMB increased the DoD budget topline by approximately \$11 billion, from which DoD leaders directed that \$7 billion go to the Army, \$1 billion apiece to the DoN and the Air Force, and \$2 billion to a management reserve for high-priority DoD initiatives.⁵⁵ Although the Army's move therefore did not result in cuts to the DoN and Air Force toplines, from the perspective of Navy and Air Force planners the Army was successful in increasing its overall budget allocation. Both services will likely believe that they must counterpunch—to "insist" (Huntington's word) on an *equal* increase in defense resources. This appears to be just what is happening. Early reports are that the requests for the follow-on FY07 defense supplemental total an astounding \$160 billion dollars, with the Army asking for \$80 billion, the Air Force \$50 billion, and the DoN \$30 billion.⁵⁶

The Army's aggressive public move to push for more resources and the oncoming machinations over the FY07 Supplemental suggests that the only viable strategy for increasing the DoN's budget is for Navy planners to argue for a dramatic increase in the *overall* allocation of defense dollars, which would raise the allocations for all departments. However, even this approach will be difficult to pull off. In real dollars, the United States is spending more on defense than at any time since 1952, when the U.S. military was conducting high-intensity, multi-corps offensive combat operations against the Communist Chinese on the Korean Peninsula. Said another way, adjusted for inflation, the United States is spending more than it did at any time in the Vietnam War or during the 1980s Reagan defense buildup. And these comparisons do not include the additional tens of billions of dollars now being allocated to the Department of Homeland Security.⁵⁷

Some argue that focusing on the overall amount of absolute defense spending is far less informative than focusing on the percentage of the U.S. gross domestic product (GDP) spent on defense. Using percentage of GDP as the baseline, the overall burden of defense spending on the U.S. economy has been steadily decreasing. Today's defense expenditures amount to approximately 3.8–4.0 percent of the GDP, a far cry from the 15 percent in the early 1950s, the 10 percent in the mid-1960s, and the 6 percent in the 1980s.⁵⁸ Thus, the argument goes, the nation could easily afford a major increase in defense spending, raising all service boats in a tide of dollars.

However, this argument has its own problems. Percentages of mandatory spending—due primarily to increases in personal entitlement programs such as Social Security—are now much higher than at any time in the past, and the percentage is rising as the baby boomers begin to reach retirement in 2008. Of course, as mandatory spending increases, discretionary spending naturally decreases. The Government Accounting Office, the investigative arm of Congress that audits and evaluates the performance of the federal government, forecasts that increases in mandatory spending for entitlement programs and continuing deficit spending will result in a

55. "England Directs \$7 Billion Increase in Army's FY-08 Budget Request," *Inside the Pentagon*, October 6, 2006, p. 1; "England Sets Aside \$2 Billion for FY-08 High Priority Needs," *Inside the Air Force*, November 3, 2006.

56. "Services Propose Additional \$160 Billion for FY-07 Supplemental," *Inside the Pentagon*, November 3, 2006.

57. See Table 2, National Defense (050) Budget Authority, FY 1946-FY 2011, in Kosiak, *Analysis of the FY 2007 Defense Budget Request*.

58. See Graph 3, "National Defense Outlays as a Share of GDP," in *ibid*.

“fiscal tsunami” in the next decade unless major changes are made.⁵⁹ Navy leaders arguing for a dramatic increase in defense budget spending without concomitant tax increases would have to contend with counterarguments that such increases would simply be making a bad fiscal situation worse. On the other hand, if they argue for tax increases to help pay for increases in the defense budget, Navy leaders would be arguing against the stated fiscal policy of the administration—a risky proposition.

A Range of Diffuse Challenges

Navy hopes on having a conversation within the service and with the American political leadership and people, in which it offers a “systematic, detailed elaboration and presentation of the theory of” the twenty-first-century Navy to increase the “public confidence with its important role in national defense” and to trigger a sustained increase in future resources, thus faces an uphill battle.⁶⁰ If this were not daunting enough, the contemporary national security environment will make it extremely difficult to convey the Navy’s role in national defense in an easy-to-understand way.

Unlike in 1890 and 1980, the U.S. Navy faces not one but a bewildering array of threats. It will thus be far more difficult to articulate a maritime grand strategy—a strategy that lays out a single theory (i.e., strategic concept) for the twenty-first-century Navy. As the 2006 QDR explains, there are four different types of potential future threats the U.S. armed forces must prepare for: *traditional challenges* involving confrontations against another state’s military forces; *irregular challenges* involving conflicts against enemy combatants who are not part of the regular military forces of nation states; *catastrophic challenges* involving adversaries seeking to or actually trying to employ weapons of mass destruction (WMD); and *disruptive challenges* involving state and nonstate actors trying to upend the United States’ ability to maintain its qualitative technological edge or to project power.⁶¹ The battle fleet must be able to handle all of these disparate threats.

In more concrete terms, the Navy of today has to simultaneously fulfill its role as ultimate guarantor of the broad ocean commons, a role it assumed after World War II, when Great Britain’s mighty Royal Navy proved no longer up to the task; along with the Coast Guard, it must secure the maritime approaches to the United States and help defend the homeland from attack; together with the other services, it must fight and win the Long War—a global struggle against radical Islamists and other violent ideological groups; be prepared to support conventional joint military campaigns; be prepared to operate in a proliferated world, in which the likelihood of nuclear weapons use will likely be higher than at any point since 1962; be prepared to venture into an increasingly capable Chinese maritime anti-access and area-denial (A2/AD) network to help thwart any overt Chinese move to invade or coerce the Republic of Taiwan; prepare itself for a wider future maritime challenge; and guard against a wide range of technological, disruptive challenges.

Faced by such a wide array of challenges, it is not at all clear the Navy itself has sorted out how to best array these threats, much less how it intends to prioritize its efforts to confront them. The closest it has come is acknowledging that the future battle fleet must be designed to meet two challenges: fighting the Long War and hedging against the rise of a major maritime challenger,

59. Matt Crenson, “GAO Chief Warns Economic Disaster Looms,” accessed online at http://www.examiner.com/a-367406~GAO_Chief_Warns_Economic_Disaster_Looms.html on October 30, 2006. See also Government Accounting Office, “The Nation’s Long-Term Fiscal Outlook, September 2006 Update; The Bottom Line: Today’s Fiscal Policy Remains Unsustainable,” GAO publication GAO-06-1077R.

60. Huntington, “National Policy and the Transoceanic Navy,” p. 493.

61. Donald Rumsfeld, Secretary of Defense, *Quadrennial Defense Review Report* (Washington, D.C.: Office of the Secretary of Defense, February 6, 2006), p. 3.

like China. This has led at least one respected naval analyst to argue for a bi-modal navy, with one part of the battle fleet focused on " 'small' operations, expeditionary in nature, in which the Navy will continue to participate," and the other part focused on a "distributed fleet that is offensively disposed yet can suffer losses and fight on." This idea in itself is very significant; unlike the two models for naval strategy previously discussed, it indicates the Navy may no longer be disposed toward regarding "small wars" or theater-shaping activities as lesser-included cases of a broader naval war, and that it will require unique forces optimized for these roles.⁶²

However, even a bi-modal battle fleet might be insufficient to cover the full range of future threats the Navy must prepare for. For example, two possible new missions in securing the ocean commons are protecting the burgeoning offshore oil and gas infrastructure, which for the first time presents adversaries with ocean targets whose destruction would result in disruptions to *both* worldwide distribution and production; and guarding the array of undersea fiber optic cables that now bind, connect, and drive the global economy. How do these roles figure into the Navy's plans? Will they require new, specialized capabilities? Similarly, sea-based ballistic missile defense is an important capability for homeland defense, a proliferated world, and operations against a Chinese maritime A2/AD network. Yet, to this point, the Navy has been reluctant to expend its own resources on the mission, content instead to let the Missile Defense Agency fund most sea-based ballistic missile defense capabilities. Is the U.S. Navy going to fully embrace this mission? Finally, in terms of disruptive challenges, the undersea arena may be on the verge of a third revolution, in which undersea superiority will be decided by clashes between undersea combat networks consisting of large manned submarines; smaller manned submarines; remotely operated and autonomous underwater vehicles (ROVs and AUVs, respectively); ubiquitous ocean sensors; and surface, air, and space-based anti-undersea warfare capabilities. While the Navy has long dominated the second regime, in which nuclear-powered submarines were the dominant systems, what are its strategy and plans to ensure it dominates the next?

Questions to Ponder

The wide range and diversity of potential future naval threats prompts a bevy of questions. Is the Navy's search for a new single maritime grand strategy the right approach? Is a single unified maritime strategy even possible, or desirable? Would the Navy be better advised at this time simply to describe the maritime component of the National Security and National Military Strategy, as did the earlier *Maritime Strategy*? Even if a maritime grand strategy is desirable, given the great lead the U.S. Navy now enjoys in the global maritime competition, the lack of a near-term threat, and the difficulty in directly arguing for a bigger share of the DoD budget or a major increase in the overall defense budget, will its tenets be so broad and diffuse as to dilute the galvanizing effect the Navy obviously hopes the new strategy will trigger? Will a conversation with the American people really help to illuminate the priorities among the many challenges the battle fleet faces? Or should the conversation with the American people be delayed until further passionate debates and discussions occur inside the Navy and the Marine Corps? Would it be better to first develop a family of separate operational concepts focused on each evolving threat, and then to produce an integrated naval operational concept and strategy after that? Said another way, would explaining how the Navy intends to help win the Long War, to play a central role in the operations against nuclear-armed regional adversaries, and to blunt any future aggressive maritime challenges be a better conversation to have with the American people?

62. Captain Wayne P. Hughes, Jr., USN (ret), "A Bi-Modal Force for the National Maritime Strategy," paper dated October 1, 2006, and presented to the Center for Naval Analysis Forum on Maritime Strategy, October 26-27, 2006. pp. 11-12.

More fundamentally, are the two earlier maritime grand strategies that now guide the Navy's search for the new naval holy grail the right models? Both were written when the Navy's contributory role in the nation's defense was being questioned and when its position in the global maritime pecking order was being threatened. Both were designed, either directly or indirectly, to help raise the value of DoN shares in the American defense market. Perhaps the focus of the DoN's effort should be guided by entirely different approaches—such as strategies adopted by other great naval powers during times when they did not face a major threat and when they could not justify or command disproportionate increases in the amount of resources devoted to maintain, much less expand, their maritime capabilities.

For example, would it be better to follow models of navies trying to hold what they had? In other words, would it be better to follow models of navies trying to hold what they had and positioning themselves for a time when actual threats developed more fully? If so, this would argue that naval planners look as deeply inward as outward and concentrate on developing new institutional strategies for maintaining excellence on a tightly constrained budget. It might also argue that the Navy worry less about developing a maritime grand strategy and more about developing a maritime *competition* strategy that protects its design, industrial, research and development, and technological bases; rethinks the way it designs and builds its warships; and focuses on approaches, like widespread modularity, that will give the battle fleet utility across a far wider range of operational challenges. In this regard, one possible model to inform these efforts is the English naval competition strategy adopted between 1815 (the defeat of Revolutionary France) and 1860 (the appearance of the HMS *Warrior*), when the British Royal Navy stood unchallenged on the high seas but faced a number of ongoing but minor security challenges, numerous potential future technological and disruptive challenges, and a number of potential future naval challengers.

The answers to these varied questions, while important, are beyond the scope of this paper. They are left for another time and place. However, if this paper suggests one thing, it is that while the “economics” of the new naval strategy should be an important consideration in its development, the Navy should be realistic in its expectations over the strategy's impact on future resource allocations. In other words, the Navy should not expect any major increases in future budgets. Instead, it should make plans, at least in the short run, for flat or perhaps even declining budgets, and adjust its desires, plans—and strategies—accordingly.

China's Economic Rise: Impact on U.S.-Australian Alliance

Dr. Leif R. Rosenberger
Economic Adviser, U.S. Pacific Command

INTRODUCTION

China's spectacular economic trajectory is shaking Asia and much of the world. At first many U.S. and Asian leaders saw China as a commercial and military threat. But before long, Asian leaders came to see China's economic rise as a blessing rather than a threat.

Competing U.S. and Aussie Perceptions

In an interview marking his tenth anniversary in office, Australian Prime Minister Howard highlighted the rising Sino-Australian economic relationship.¹ He said Australia "would be crazy" not to cultivate its economic ties to China. But he underscored that Australia would "not go overboard" with China. That said, Howard rolled out the red carpet for Chinese officials in Australia. And Beijing did much the same when Howard visited China in late June/early July 2006.

In contrast, U.S. President Bush treated Chinese President Hu differently during his visit. When Hu visited Washington the Bush administration refused to classify it as a "state" visit. Instead, Hu was given a "working lunch." And in an administration that carefully choreographs every little detail and every person invited to the White House, Hu was subjected to prolonged heckling by a Falun Gong protester at the opening ceremony. Even worse was the introduction of the Chinese national anthem as that of the "Republic of China," the formal name for Taiwan. In short, Bush gave Hu the cold shoulder.

To be fair, Hu did get to see Bill Gates. In fact, Hu also spent lots of time with the U.S. business community. In this regard, China will soon overtake Japan as America's third-biggest export market. U.S. exports to China rose nearly 37 percent in the first five months from a year earlier.² And it's true that American companies operating in China enjoyed another year of strong profits in 2005. U.S.-affiliated companies enjoyed record earnings of \$3.2 billion in 2005.

That said, corporate America goes out of its way to hide its successes in China. Why hide a U.S. corporate success story? U.S. Undersecretary of Commerce for International Trade Franklin Lavin says the U.S. export strength tends to get "washed out of people's minds" because imports from China are so much larger.³ The United States reported an \$82 billion trade deficit with China for the first five months of 2006. The media is quick to bash China for this imbalance. CNN's Lou Dobbs frequently criticizes U.S. corporations that are reportedly exporting U.S. jobs to China. Given all this negative publicity in the United States about China linked to outsourcing and manufacturing job losses, it makes U.S. corporations unpopular if they talk about doing well in China. Such economic nationalism has taken its toll on U.S. foreign direct investment (FDI) in China, which dropped 22.3 percent in 2005, from \$3.9 billion in 2004 to \$3 billion in 2005.

The key point is that Australian exports of raw materials to China create jobs in Australia and is a political winner. In contrast, U.S. commercial relations with China are a political loser. CNN's Lou Dobbs would argue that Chinese exports to the United States kill U.S. jobs. Consequently, most U.S. corporations want to fly under the radar and hide their hand when they deal with China.

Sino-Australian Shared Prosperity

Let's now contrast Australia's economic relationship with China with its longstanding economic ties to the United States. Australia's commodity and service exports to China are booming. In contrast, the United States is losing the economic high ground with Australia. Sino-Australian merchandise trade skyrocketed 248 percent between 2000 and 2005. In contrast, U.S.-Australian trade has been virtually flat—growing only 13 percent between 2000 and 2005. Five years ago Australia traded twice as much with the United States as with China. Today the situation has reversed itself. Australia now trades twice as much with China as with the United States.⁴ Tradewise, China is more important to Australia than the United States is.

China's emergence in the north as the world's manufacturing center has a counterpart in the south. Australia is supplying much of the iron ore, nonferrous metals, coal, and higher education that fuel China's industrial revolution. China's economic growth and its impact on the world's demand for resources is the key factor driving Australia's outstanding export performance. Aussie exports of resources to China alone surged by 87 percent to \$8.3 billion in 2005. Take iron ore tonnage. Tonnage of Australian exports to China tripled between 2002 and 2005 to 112 million tons. China's global demand has also raised global prices. Australia's iron ore miners received a 71 percent price increase in 2005 and gained a further 19 percent hike in 2006.⁵

China's growth is vital to Australia's prosperity. Australia's Reserve Bank Governor Ian MacFarlane recently stated that in the past three years Australia's terms of trade have increased by around 30 percent. He pinpointed global demand for resources and the rise of China as the driving factors.⁶ The economic flow-on effects include strong growth in business investment, rising corporate profits, and an increase in stock prices. The strong demand from China has continued in 2006. In the ten months to April 2006 Australian exports to China soared to US\$14.5 billion—a 42 percent rise compared to the same period last year.⁷ The result is a dilemma for Canberra. It must somehow strike a balance between its increasingly important commercial relationship with China and its longstanding security ties to the United States.

COMPETING THREAT PERCEPTIONS

In contrast to Australia, the realists in Washington, D.C., tend to perceive China as both a commercial and a military threat. In their eyes, the economic rise of China drives the rise of Chinese military power. They see China's charm offensive and shared prosperity with U.S. allies and friends in Asia as part of an overall Chinese military strategy.⁸ At a strategic level, this Chinese shared prosperity with Australia and other countries in Asia arguably gives Beijing a stake in stability and makes war less likely than when China's trade in the region was at a low level. But if war breaks out between China and Taiwan, China's shared prosperity in the region increases the risk for the United States (due to possible access denial to U.S. bases and places) at the operational level of war.

Back in August 2004 Australian Foreign Minister Downer publicly told the Chinese in Beijing that Australia was not bound to help the United States defend Taiwan in a China-Taiwan war. Today—two years after Downer's comment—Australia's trade with China dwarfs its trade with the United States. Australia will try hard to placate the United States while bending over backwards not to antagonize China and jeopardize its highly prized economic relationship with China.

Some U.S. observers dismiss Downer's statement and say the United States can always count on Japan for U.S. unrestricted access to bases in Japan in a Taiwan scenario. In fact, they say this is even more likely today. They point to recent Sino-Japanese maritime tension over competing energy claims in the East China Sea. Maybe so. But Japan now trades more with China

than with the United States. In addition, the Chinese Foreign Ministry announced on 18 November 2006 that since new Japanese Prime Minister Shinzo Abe's visit to China on 8 October 2006, Sino-Japanese relations have "improved dramatically and are now back on track."⁹ Mr. Abe rejects the idea that Sino-Japanese relations are in a downward spiral toward conflict. In fact, Abe says close Sino-Japanese shared prosperity outweighs any political friction. In his words, "During the Koizumi administration, trade has doubled and Japanese investment in China rose by 20 percent in 2005 from 2004. If relations were bad, this wouldn't have happened. China benefits from current economic relations and doesn't want to destroy it. It's the same with Japan."

If Abe would not go to war with China when Japanese national interests are at stake, then it's at least problematic that Japan would go to war simply to protect U.S. national interests in Taiwan. Due to China's shared prosperity with countries in the region, the U.S. military cannot count on access to a so-called network of cooperation security locations (CSLs) in South and SE Asia in a China-Taiwan conflict. As a result, the U.S. Navy will need two carriers to win such a scenario.

COMPETING U.S.-AUSTRALIAN ENERGY PERSPECTIVES

Washington also sees China as a threat on the energy front. This U.S. economic nationalism was visible in 2005 when China National Offshore Oil Corporation (CNOOC), a 70 percent Chinese government-owned company, made a \$19.6 billion offer to buy Union Oil Company of California (or UNOCAL), the U.S. oil and gas group.¹⁰ It was the biggest overseas bid at that time by a Chinese company, the first to trigger a contested takeover battle with Chevron and the first to be made in a politically strategic sector in the United States.

Most U.S. lawmakers argued that the CNOOC bid should be vetted on traditional national security grounds. They feared the United States would be losing a national energy asset if they did not work to block the CNOOC bid. They had mental images of CNOOC somehow hoarding UNOCAL energy for Chinese consumers. They argued that CNOOC threatened U.S. energy security. In the end, the U.S. Congress effectively blocked any Chinese takeover of UNOCAL.

U.S. lawmakers were ill-advised. Their fears are at odds with how the global energy market actually works. For starters, oil is a fungible commodity. For every barrel of oil China might divert for its exclusive use, China would import one less barrel of oil from other sources. The global price and availability of oil to the United States would remain exactly as before. While denial of access to oil can be used as a military tool in wartime, this depends not on ownership but on the ability to secure installations and blockade oil lanes. China is vastly more vulnerable to an oil squeeze than the United States with its unchallenged navy. A national security issue does exist here, but it cuts the other way. Washington should (a) promote free trade and (b) beef up U.S. naval presence in the Asia and Pacific to protect it.

Sino-Australian Energy Ties

Now let's contrast this U.S. tension with China on the energy front with Sino-Australia energy relations. In early April 2006 China and Australia signed a nuclear safeguards treaty, which punctuates an increasingly important economic relationship. The treaty could pave the way for exports of uranium to China for peaceful uses. China is searching for new supplies of uranium as part of its strategy to diversify energy supplies away from coal-fired power stations. As part of its new-year economic blueprint, China is committed to reducing air pollution and reliance on coal. By 2020 China hopes to increase fourfold the amount of nuclear energy it produces. And yet Australian Prime Minister John Howard says that Washington's efforts to curb nuclear enrichment worldwide may well be at odds with the energy requirements of Australia.¹¹

Then in late June 2006 the prime ministers of China and Australia, Wen Jiabao and John Howard, proudly presided over the landing in China of the first commercial shipment of liquefied natural gas (LNG). Mr Howard called the LNG shipment, part of an \$18 billion long-term contract guaranteeing supplies for 25 years, the largest single trade deal for Australia and “hugely significant” for its resource-dependent exports. He said it could be not only a big deal in its own right, but the beginning of an enormous additional segment of Australia’s trade with China.

CONCLUSIONS AND RECOMMENDATIONS

China’s shared prosperity with U.S. allies and friends means that U.S. access to bases and places is problematic at best in a China-Taiwan scenario. Without guaranteed U.S. access to Asian bases and places for U.S. offensive and defensive operations, the U.S. military needs to beef up its naval presence at U.S. bases like Guam and Pearl Harbor, where access is far more reliable.

On the energy front, U.S. denial of access to oil is an important military tool in wartime. But this depends not on whether or not China owns UNOCAL or some other U.S. oil company. It depends on the U.S. Navy’s ability to secure installations and blockade oil lanes. China is vastly more vulnerable to an oil squeeze than the United States. A national security issue does exist here, but it cuts the other way. Washington should (a) promote free trade and (b) beef up U.S. naval presence in the Asia and Pacific to protect it.

Notes

1. *FT.com*, 28 February 2006.
2. *FT.com*, 26 July 2006.
3. *FT.com*, 26 July 2006.
4. Discussions with officials from U.S. Commerce and U.S. Trade Representative (USTR), February and March 2006.
5. *Australian Financial Review (AFR)*, 6 July 2006, p. 11.
6. Australia’s Reserve Bank Governor Ian MacFarlane, testimony before Australia’s federal parliament, February 2006.
7. *AFR*, 6 July 2006.
8. See Milton Osborne, *The Paramount Power: China and the Countries of Southeast Asia*, Lowy Institute Paper 11, 2006.
9. *Bloomberg.com*, 18 November 2006.
10. *FT.com*, 24 June 2005.
11. See Rafael Minder, “Howard Says Australia Must Assess Impact of Nuclear Alliance,” *FT.com*, 20 July 2006.

Panel III: Economics and Emerging Maritime Powers

Summary of Discussion

Dr. Mackubin Thomas Owens

**Associate Dean of Academics for Electives and Directed Research and Professor of National Security Decision Making
U.S. Naval War College**

The main topic during the discussion period for Panel III was the role of China. The issue essentially boils down to the question of China's willingness to seek peace and prosperity in a U.S.-underwritten system of globalization or, alternatively, to seek global power within an architecture of its own making. This debate provides the context for such questions as the Taiwan Strait, China's diplomatic offensive to increase its influence, China's military strategy and future force structure, the attitude of emerging powers (India) and medium-size states (Australia) in Asia toward China and the United States, China's access to energy, and U.S. policy toward China.

The point was made that China believes its legitimacy arises not from democracy but from economic growth, which is the only means available to it to ensure stability. The formula is China becomes strong, China becomes prosperous, China becomes democratic. The Chinese see the Gorbachev model as getting things backward. To unleash democracy first is to unleash chaos. This accounts for the Chinese focus on economic growth and provides an understanding for China's priorities in the region. In fact, China is now a status quo country, a far cry from its Maoist past. Indeed, China has become so status quo that it has begun to substitute sustainable economic growth for maximum economic growth because of the environmental costs associated with the latter.

This hierarchy suits other states in the region, especially those of middling power—e.g., Australia, which has become very dependent on trade with China. This dependence has led some to ask if Australia would support the United States in a time of crisis. The rule for a middle power seems to be to try to avoid choosing sides during peacetime. The consensus was that Australia would abide by this rule but in the event of a crisis, say in the Taiwan Strait, it would support the United States.

The United States sees its self-appointed role in Asia as a force for stability, preventing arms racing by reassuring not only friends and allies but also potential competitors. The United States has done this in Asia by means of bilateral treaties, acting as the hub to a variety of spokes. China envisions multilateral security architecture. These competing arrangements will be a source of disagreement in the future as both the United States and China attempt to expand their influence in the region.

The main source of conflict between the United States and China remains the Taiwan Strait, but even this is a less likely flash point now. Taiwan remains an emotional issue for the Chinese, and the principal danger is miscalculation. Even though the danger is reduced, part of the People's Liberation Army (PLA) sees a potential conflict involving Taiwan as a "meal ticket" and so has an incentive to play up the likelihood of Taiwanese independence. It is in the U.S. interest to keep Taiwan under control. If things remain stable, this potential flash point could go away altogether in the next decade or so.

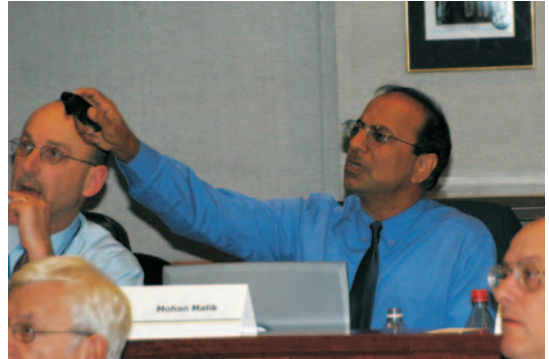
The Japanese fear that the new U.S. maritime strategy is a harbinger of U.S. withdrawal from the Western Pacific. We are already discussing the shift of forces from Japan to Guam. The perception of U.S. withdrawal from WestPac contributes to a loss of U.S. credibility.

China and India remain at odds. India is concerned about Chinese geopolitical penetration into the Indian Ocean region. China polls very poorly in India, and the recent rapprochement between India and the United States probably represents a balancing maneuver on the part of India.

The critical uncertainty for the region is China's goal for the future. If it can be accommodated into the U.S. system of globalization, and if Taiwan does not declare independence, the likelihood of conflict is relatively low. If China wants to become a great power, things are a little more problematic. In such a scenario, it is possible to envision a replay of the geopolitical struggle between Great Britain and Germany in the latter part of the nineteenth century, which assuredly brought nineteenth-century globalization to an end.

Panel IV

Terrorism, Proliferation, Transnational Crime, and Migration



Dr. Rohan Gunaratna

Director, International Center for the Study of Terrorism and Political Violence, The Institute of Defence and Strategic Studies at Nanyang Technological University, Singapore

Dr. Mohan Malik

Professor, Asia-Pacific Center for Security Studies

Andrea J. Dew

Research Fellow, Belfer Center for Science and International Affairs, Kennedy School of Government, Harvard University

Moderator:

Professor Jeffrey H. Norwitz

John Nicholas Brown Academic Chair of Counterterrorism and Professor of National Security Decision Making, U.S. Naval War College

The Threat to the Maritime Domain: How Real Is the Terrorist Threat?¹

Dr. Rohan Gunaratna

Head, International Centre for Political Violence and Terrorism Research, Nanyang Technological University, Singapore, and Senior Fellow, Jebson Center for Counter-Terrorism Studies, Fletcher School of Law and Diplomacy

Introduction

Armed groups seek to attack aviation, maritime, and land transportation targets. In the class of threats, the terrorist intentions and capabilities to strike transportation infrastructure have grown dramatically since September 11, 2001. Although land transportation remains more vulnerable to attack, aviation remains the preferred target of multiple threat groups. Since Al Qaeda used commercial aircraft to attack America's iconic targets, multiple attempts to target aviation have been detected and disrupted by security, intelligence, and law enforcement. The UK authorities disrupted an elaborate plot in August 2006 to attack a dozen aircraft from London bound for the United States. The threat has been sustained.² Similarly, the successful attacks on land transportation targets in Madrid on March 11, 2004; in London on July 7, 2006; and Mumbai on July 11, 2006; demonstrate both the dispersed and enduring nature of the threat. The failed attack in London on July 21, 2006, and several attempts in continental Europe and elsewhere, demonstrate that the threat is recurrent.

To assess the current and emerging threat, it is necessary to understand how armed groups exploit the maritime domain. The lack of understanding of the guerrilla and terrorist interface with the maritime environment has led to a hyping of the threat. This has led the commercial and naval community to invest billions of dollars in protecting and securing maritime assets. What is the real threat to onshore and offshore maritime infrastructure from sea, land, and air? This paper will examine the development of maritime terrorist and guerrilla capabilities and how guerrilla and terrorist groups have penetrated the maritime domain both to support their operations and to mount attacks.

-
1. I would like to thank Professor Rich Lloyd, The William B. Ruger Chair of National Security Economics at the Naval War College, and Professor Jeff Norwitz, The John N. Brown Academic Chair of Counterterrorism at the Naval War College, for their invitation to speak at the Economics and Maritime Strategy Ruger Chair Workshop, November 7–8, 2006, and to write this paper.
 2. On December 22, 2001, Richard Reid, wearing a TATP-laden operational shoe bomb, boarded a Paris-to-Miami-bound American Airline flight. In Operation Snagged, an identical shoe bomb was recovered from 44 St. James Street, Barton, on November 27, 2003. In Operation Dover Port, Andrew Rowe was arrested at a port in France on October 26, 2003. He was planning to attack Heathrow. On September 15, 2004, a fully operational shoe bomb mailed from Thailand to California was detected at the Carson mail facility in California. In 2005, an Algerian terrorist prosecuted in Northern Ireland had a manual advising the bomber to detonate his shoe bomb in the aircraft toilet. Global Pathfinder Database, International Centre for Political Violence and Terrorism Research, Nanyang Technological University, Singapore, accessed November 11, 2006.

Understanding the Maritime Domain

A study of maritime-capable groups worldwide demonstrates that only a few armed groups have developed the capabilities to mount attacks on maritime targets. Most groups exploit the maritime environment to transport goods and personnel.³ The attacks in the aviation domain are not restricted to aircraft. Armed groups seek to attack not only aircraft, ships, and land transportation but also airports, ports, and land transportation hubs. Attacking an airport could have the same effect as attacking an aircraft. Similarly, an attack on a railway station could have the same effect as attacking a train. Likewise, an attack on a port will have the same effect—or a greater effect—than an attack on a ship. Unlike the aviation and land transportation domains, the maritime domain naturally does not constitute an attractive domain to attack. The terrorist preference is to attack a high-profile national symbol. In a globalized world, an attack on an aircraft in any part of the highly visible aviation arena will have global implications. In contrast to damaging a ship on the sea surface, bombing an airliner in the skies or an international airport will draw extensive publicity and generate fear. As such, the threat to aviation and airports is very high compared to the threat to the maritime and land domains.

It has been argued that hardening aviation and airport targets has shifted the threat to maritime targets. Certainly threat displacement has taken place, but still, due to the potential for high publicity, the terrorist preference is to attack hardened targets. After 9-11, more than a dozen plots to attack airlines, both in the sky and on the ground, have been foiled or aborted. This demonstrates that contemporary terrorists are keen to identify the gaps and loopholes in security and penetrate the aviation domain rather than strike the maritime domain.

In most cases, guerrilla and terrorist groups will attack a maritime target only if it is attractive or profitable. Attacking a ship on the high seas is like a tree falling in the forest. Guerrilla and terrorist groups seek to mount low-cost, high-impact attacks. As armed groups seek publicity, their preference is to attack a target near the waterfront or in port. Furthermore, most groups do not have access to large boats or ships that can operate outside territorial waters. Except to steal cargo or kidnap personnel and passengers, the guerrillas and terrorists prefer to attack targets not far away from shore. As such, guerrilla and terrorist target choices reduce the threat to maritime infrastructure. By nature, most guerrillas and terrorists are landlubbers.

Understanding the Maritime Threat

Maritime guerrilla and terrorist capabilities are an extension of the land capabilities. However, maritime intentions are different from maritime capabilities. Translating intentions into capabilities requires significant human expertise (experience and training) and resources. If a guerrilla and terrorist group can develop its understanding and knowledge of the maritime environment, it will begin to exploit that domain. In the early phases, most groups use the maritime environment to support land operations and, second, to mount attacks.

At this point in time, only a few groups have the domain expertise. Even fewer groups have developed the capacities to operate out at sea. If they are to operate in a sustained manner, they must possess or have access to a fleet of craft, usually fishing craft, and seafarers. The overall terrorist and guerrilla know-how and understanding of operating in the maritime domain are limited. The body of knowledge and understanding is growing by direct transfer and by

3. It is very much like the terrorist and the extremist use of the Internet. Instead of mounting attacks on information infrastructure, terrorist and guerrilla groups use the Internet to disseminate propaganda, raise funds, train, rehearse, and coordinate operations. Likewise, the maritime domain is primarily a medium to support operations and not to mount attacks.

emulation. More armed groups are likely to mount guerrilla and terrorist tactics in the maritime domain in the future.

Among the contemporary terrorist and guerrilla groups, only half a dozen groups have developed maritime attack capabilities. The most prominent among them are the Palestinian Hamas, the Lebanese Hezbollah, the Abu Sayyaf Group (ASG), the Free Aceh Movement, the Moro Islamic Liberation Front, Al Qaeda, and the Liberation Tigers of Tamil Eelam (LTTE). We consider two case studies: Al Qaeda and the LTTE. Of these two groups, the LTTE has built a state-of-the-art blue-, brown-, and green-water capability, both for support and attack operations. To penetrate the maritime domain, the LTTE operations serve as a model for other terrorist and guerrilla groups.

The LTTE Maritime Structure

The LTTE maritime organizational structure provides insight into the future capabilities of terrorist and guerrilla groups seeking to operate in the maritime environment.

1. Sea battle regiments
2. Underwater demolition teams
3. Sea Tiger strike groups
4. Marine engineering and boat-building unit
5. Radar and telecom unit
6. Marine weapons armory and dump group
7. Maritime school and academy
8. Recruiting section
9. Political, financial, and propaganda section
10. EEZ-marine logistics support team
11. Reconnaissance team and intelligence section
12. Welfare and registry.

The LTTE was able to build a robust maritime infrastructure because of the initial assistance it received from India's foreign intelligence service, Research and Analysis Wing (RAW). In 1986–87, RAW trained LTTE members in Vishakapatnam, a seaport in Andhra Pradesh, and facilitated the LTTE's construction of a blue-water fleet. After the LTTE declared war on the government of India in 1987, the LTTE maritime capabilities suffered extensively. After the LTTE support structures moved out of India's sphere of influence, the LTTE built up a state-of-the-art shipping and procurement network in Europe to procure and ship dual-user technologies and weapons. For instance, the LTTE procured 60 tonnes of high explosives from the Ukraine and transported it onboard MV *Baris* (previously MV *Illiyana*, and thereafter MV *Tara 1* and MV *Venus*) during the peace talks in 1994. After the shipping network in Europe was disrupted under Indian pressure, the LTTE strengthened its existing financial, procurement, and shipping network in Southeast Asia. The LTTE used its commercial presence in Southeast Asia to build operational bases, primarily using Myanmar's island of Twante and, thereafter, Thailand's Pukhet. The LTTE boatyard in Pukhet was building a minisubmarine.

After the Thai authorities shut down the boatyard, the LTTE moved its boat-building activities to New Zealand. Boat designs procured in Australia and built in New Zealand were used in maritime suicide attacks in Sri Lanka.

As the LTTE is not an Islamist group, it is not perceived as a threat by most foreign governments. Thus, the LTTE continues to operate both in Sri Lanka and globally through front, cover, and sympathetic organizations. They include trading and commercial firms, especially fertilizer and shipping companies.

Al Qaeda's Maritime Structure

In contrast to the LTTE, Al Qaeda does not possess a permanent and robust infrastructure dedicated to maritime operations. Unlike the LTTE, Al Qaeda has neither a blue- nor a brown-water fleet. Although two dozen ships linked with Al Qaeda members, supporters, and families have been identified by the intelligence community, to date no ship has been intercepted transporting weapons. However, Al Qaeda mounted a number of terrorist attacks, successfully and unsuccessfully. Al Qaeda leadership tasked its operations leader in the Arabian Peninsula⁴—Abd al Rahim al Nashiri, alias Abu Bilal, alias Mullah Bilal, alias the Prince of the Sea, a specialist in explosives—to mount maritime attacks in 1999. Osama bin Laden specifically instructed al Nashiri to attack oil supertankers. A Saudi of Yemeni roots, al Nashiri operated largely out of Yemen, both with Al Qaeda and with other Islamist groups. He had links with individuals and groups in the Arabian Peninsula and North Africa.

As there was no dedicated maritime component in Al Qaeda, the rest of the organization assisted al Nashiri. For instance, Tawfiq bin Attash alias Khallad, deputy of Khalid Sheikh Mohamed (9-11 mastermind), visited with al Nashiri and his associates to support his operations both in the Middle East and in Southeast Asia. By watching videos of Al Qaeda recordings of LTTE maritime attack on international television channels,⁵ Al Qaeda copied LTTE maritime tactics as well as developed their own repertoire of tactics. They included blowing up explosives-laden vessels near naval, merchant, and cruise ships; blowing up explosives-laden vessels at seaports; using big ships, including tankers, to crash into smaller vessels; diving aircraft into ships, including into an aircraft carrier; using underwater demolition teams to destroy ships; and sinking ships in narrow channels. Responsible for attacking the USS *Cole* and MV *Limburg*, al Nashiri succeeded in blowing up explosives-laden boats near naval and merchant ships.

Even in the conduct of maritime operations, Al Qaeda had no problem with working with like-minded individuals and other groups. As a result, Al Qaeda traces were found in maritime operations mounted by other groups. Al Qaeda trained in Iraq and funded an operational cell in Turkey that was planning and preparing to strike an Israeli cruise ship. Other leaders and members of Al Qaeda and its associated groups attempted a number of other maritime attacks. In Singapore, working with Al Qaeda, Jemaah Islamiyah (JI) members mounted surveillance on

4. Al Nashiri, the first head of the Al Qaeda organization in the Arabian peninsula, was succeeded by Yousef al Ayyari. After al Ayyari was killed by Saudi security forces in May 2003, Abu Hazim al Shair al Yemeni, a former bodyguard of Osama and a poet, was appointed. Abu Hazim al Shair recruited pilots to attack Heathrow. Abu Hazim al Shair was succeeded by Abdu Aziz al Mukrin. After al Mukrin was killed, he was succeeded by Salih Sufi. There has been a very high attrition rate of the Al Qaeda leadership in the Arabian peninsula. As the bulk of the recruits and finance for Al Qaeda originated in the Arabian peninsula, Osama handpicked the leaders of the Arabian peninsula. While most of them were former bodyguards of Osama bin Laden, they had long-standing contact with Khalid Sheikh Mohamed and Tawfiq bin Attash, also a former bodyguard of the al Qaeda leader.

5. CNN's Nic Robertson recovered about 200 tapes from the Al Qaeda registry in Afghanistan. There were few clips of LTTE maritime attacks.

U.S. warships. Video footage of U.S. ships was recovered both in the residence of a JI member in Singapore and in the bombed residence of Abu Hafs in Afghanistan. In Malaysia, Al Qaeda associate group Kumpulan Militan Malaysia (KMM) planned to kill U.S. sailors but, fearing retaliation, aborted the operation. Tawfiq bin Attash flew to Malaysia and planned to attack U.S. vessels in Port Klang in Malaysia. Al Qaeda's senior representative in Southeast Asia, Omar al Farouq, an Iraqi-Kuwaiti, and Ghalib, a Somali, planned a suicide attack on U.S. vessels exercising off Surabaya, Indonesia.

Al Qaeda Maritime Operation

Al Qaeda's road to maritime attacks developed the same way most other threat groups graduate from support to attack operations. Al Qaeda used trawlers and other vessels to transport arms, ammunition, and explosives from Yemen to neighboring countries. In fishing vessels, Al Qaeda also transported explosives into Kenya for the East Africa attack in August 1998. An Al Qaeda cell in Yemen began planning to hit USS *The Sullivans* in the spring of 1999 and made preparations in the summer of 1999. Al Qaeda began recruiting Saudis of Yemeni background and Yemeni residents, including those who wished to be suicide operatives. Al Qaeda preparations included leasing a safe house for six months, installing a gate, procuring a truck, and procuring and modifying a boat to accommodate more explosives. On January 3, 2000, when USS *The Sullivans* arrived in port, the explosives-laden suicide boat was launched from a nearby beach. From weight, the boat sank almost immediately. USS *The Sullivans* departed unaware of the attempt. The boat and explosives were recovered the next day for use in the USS *Cole* attack. As Al Qaeda in Yemen needed financing to execute the next attack, they decided to meet with Tawfiq bin Attash in Singapore. As there were visa requirements for Singapore, they shifted the venue of the meeting to Thailand. Two Al Qaeda members, Nibras and Quso, departed for Bangkok, where they met with Khallad, who gave them the money. After returning to Yemen, they made preparations in the spring and summer of 2000 to attack the USS *Cole*.

In preparation for the USS *Cole* attack, Al Qaeda built a much more extensive land infrastructure. A metal fence was built around the house they rented in an Aden suburb to keep their activities hidden from neighbors. In addition to renting a new safe house and adding a higher fence, Al Qaeda rented another apartment with a harbor view. This safe house functioned as the perfect observation post. Al Qaeda modified the boat, painted it, laid a red carpet, and refitted the insulation. Although the neighbors reported the noise of construction and power outages, the authorities failed to investigate. Compared to the USS *The Sullivans* attack, the investment Al Qaeda made to ensure the success of the attack on USS *Cole* was significant. Learning from the USS *The Sullivans* failure, Al Qaeda rehearsed the operation. To ensure that the boat had the right quantity of explosives, Al Qaeda conducted a dry run. Al Qaeda even tested the explosives. One month before the attack, in keeping with the standard operating procedure for Al Qaeda leaders, al Nashiri departed for Afghanistan.

The USS *Cole*, a guided-missile destroyer (DDG), had a crew of 346. The 154-m-long and 21-m-wide ship had a displacement of 8422 tons. The ship had a maximum speed of 33 knots. Its armaments included anti-aircraft missiles, anti-ship missiles, torpedoes, a 5-inch gun, and Phalanx CIWS. The sequence of events was:

0849 local—USS *Cole* moors for refueling in Aden Harbor
 1115 local—Ship is approached by small boat; two adult males aboard
 1122 local—Boat comes along port side of USS *Cole*
 Detonation immediately afterward

The execution phase of the attack was less than 30 minutes; the attack phase was 7 minutes. The sneak attack killed 17 and injured 42, most sailors gathering at the galley area for lunch.

The repairing of the ship cost US\$250 million. The one-billion-dollar ship was out of commission for two years. The U.S. government did not retaliate against Al Qaeda. In the eyes of the jihadists, USS *Cole* was America's state-of-the-art warship. In retaliation for the attacks on the U.S. embassies in East Africa in August 1998, USS *Cole* had fired cruise missiles at the Al Qaeda camps in Afghanistan. As such, the attack against USS *Cole* was considered a huge victory. Al Qaeda wanted to exploit the publicity to recruit and generate support. Al Qaeda leadership had instructed Quso to videotape the attack, based on a pager code, but he overslept on the day of the attack. Osama bin Laden was keen to screen the USS *Cole* attack video at his son's wedding in early 2001. Osama authorized US\$5,000 to buy the camera equipment and videotape the attack. Thus, Quso did not endear himself to Osama. Although the failure to videotape the attack was a disappointment personally for Osama, the attack itself was a significant victory for Al Qaeda.

Two years after the attack on USS *Cole*, Al Qaeda reconstituted its personnel and resources to mount a second attack in Yemen. The next visiting U.S. warship was to be the next target. But when the naval ship failed to turn up, Al Qaeda attacked MV *Limburg*, a target of opportunity. A Very Large Crude Carrier (VLCC), the 25-crew MV *Limburg* was Belgian-owned and French-flagged. The 332-m-long and 58-m-wide ship has a displacement of 300,000 tons. MV *Limburg* has a capacity for 2.16 million barrels, but the cargo at the time of the attack was 397,000 barrels. Early morning on October 6, 2002, when *Limburg* was within visual range of shore (~3 nm), an attack boat rammed the starboard (seaward) side. The oil tanker was moving slowly toward the terminal, and a pilot boat was coming along the port side. While one crew member was killed, 90,000 barrels of oil spilled. As in the USS *Cole* attack, a safe house was used with a walled courtyard, and the boat was transported to a launch site just before the attack. Directed by al Nashiri, two suicide bombers in an explosives-laden boat attacked the near-stationary vessel. Unlike in the case of the USS *Cole*, Al Qaeda targeted an oil tanker instead of a warship. Furthermore, Al Qaeda leveraged an existing indigenous extremist network. It consisted of former members and supporters of the Islamic Army of the Abyan, a group that was dismantled by the Yemeni authorities two years earlier. The Al Qaeda plan was for the attack on MV *Limburg* to coincide with a simultaneous land-based attack. Although the Al Qaeda leadership had mentioned economic targets, the attack shocked the maritime community. The Yemeni authorities briefly held the ship owner, thinking that an accident on board the *Limburg* had caused the oil to spill.

Within a month of the attack on MV *Limburg*, al Nashiri was tracked down and captured. Al Nashiri was escaping from Yemen to Malaysia. He was planning and preparing several maritime operations. When al Nashiri was arrested in November 2002, a 180-page dossier of targets was recovered from his laptop. An operation al Nashiri was planning against U.S. and UK ships in the Strait of Gibraltar, off the northern coast of Morocco, was disrupted in June 2002. Three Saudi Al Qaeda members with Moroccan wives pretending to be businessmen constituted the attack team. They had received US\$5,000 and direction from Nashiri to mount reconnaissance on both land and maritime targets. When the Al Qaeda reconnaissance cell was disrupted in June 2002, no explosives were found. NATO maritime forces responded by boarding high-risk and suspicious ships, and German naval ships escorted tankers through the Strait of Gibraltar.

Maritime Attack Capabilities

Most terrorist and guerrilla groups can build maritime support capabilities by chartering ships or leasing boats. But to mount sustained attacks, they must build their own fleet and personnel. Unlike the LTTE, Al Qaeda failed to harness its existing expertise to operate in the maritime domain. Al Qaeda failed to build a dedicated maritime infrastructure of personnel and resources to attack maritime assets. Although Al Qaeda had experts who understood the maritime

domain and operational infrastructure, it failed to grow its expertise. It was largely because the group's capabilities were scattered and had no permanent safe haven near the sea.

After the attack on USS *The Sullivans* failed, Al Qaeda explosives expert Abdul Rahman al Mohajir al Masri designed a shaped charge. A trainer at al Farook in Mes Aynak, southeast of Kabul (before the camp moved in 2000 to Kandahar), Abdul Rahman al Mohajir served under Abu Mohamed al Masri and later Hamza al Rabbayah, the successive heads of training.⁶ His reputation as the successful designer of the USS *Cole* attack was such that the leader of Al Qaeda in Iraq, Abu Musab al Zarqawi, requested the then head of Al Qaeda's external operations, Faraj al Libi, to dispatch Abdul Rahman al Mohajir to Iraq.⁷ Instead, the Al Qaeda leadership on the Pakistan-Afghanistan border offered Hamza al Rabbayah, but Zarqawi preferred Abdul Rahman al Mohajir. Zarqawi, who had mounted one maritime attack, was keen to use his expertise to mount more maritime attacks. Zarqawi also funded an attack to hit an Israeli cruise ship in the Turkish Mediterranean port of Antalya. However, Zarqawi, too, failed to develop a permanent operational infrastructure—both personnel and resources—dedicated to attacking maritime targets.

Immediately after Operation Enduring Freedom began in Afghanistan, Al Qaeda also considered hijacking an aircraft and crashing it onto a U.S. aircraft carrier in the Indian Ocean. The U.S. government released a NOTEM (note to mariners) of the impending threat. Until Al Qaeda operational leaders with the competence to operate in the maritime domain were captured or killed, Al Qaeda's maritime capabilities focused on mounting surface operations. Nonetheless, Al Qaeda was planning to build an underwater diving capability. Recoveries from the residence of Abu Hafs al Masri, alias Mohammed Atef—the Al Qaeda military commander killed in November 2001—included a diving manual. The Al Qaeda documents indicated that the group had recruited a specialist who understood diving, diving medicine, and closed-circuit and semiclosed-circuit gear. As the group needed operational cover, Al Qaeda intended to enlist the support of commercial and recreational divers to build an underwater diving capability. Furthermore, Al Qaeda had plans to establish its own diving schools. When Al Qaeda's infrastructure in Afghanistan was dismantled and its plans disrupted, its associated groups invested in building diving capabilities in Europe and in Asia. Although the Al Qaeda attempt to penetrate a diving school in Holland was detected, its training activities continued uninterrupted in Southeast Asia. With the assistance of Arab diving instructors, the ASG in the Philippines has trained at least 40 of its members in Jolo, Sulu archipelago, Mindanao since 2001.

With the diffusion of Al Qaeda's ideology of global jihad focusing on killing Westerners in large numbers, several of its associated groups are behaving like Al Qaeda. On February 27, 2004, ASG mounted an operation using a member of the Rajah Solaiman Revolutionary Movement. Redento Cain Dellosa, trained by JI, planted an explosives-laden television set in the tourist compartment of Super Ferry 14, plying between Manila and the southern Philippines. Next to the television IED the bomber left a plate of hot food to indicate that he was a passenger who had briefly stepped out of his cabin. The explosion and the subsequent fire killed 118

6. After Al Qaeda was dislodged from Afghanistan, Abdul Rahman al Mohajir accompanied Hamza al Rabbayah to South Waziristan and thereafter to North Waziristan. Under pressure from the Pakistani military, Al Qaeda dismantled its camps in South Waziristan and moved to North Waziristan to establish camps. Only the Chechen, Uigurs, and Central Asian jihadists of the Islamic Movement of Uzbekistan remained in the south. When Abdul Rahman al Mohajir was killed by Pakistani forces in April 2006, he was head of training in Waziristan.

7. Zarqawi's driver was captured and Zarqawi's computer seized by the United States in February 2005. Correspondence recovered from the computer showed that instead of Abdul Rahman al Mohajir, Faraj al Libi offered Hamza al Rabbayah. Later Faraj al Libi told CIA interrogators that Zarqawi did not have the skills of Hamza al Rabbayah and that is why Zarqawi insisted on Abdul Rahman al Mohajir.

passengers; it was the worst maritime terrorist attack in history. Several other attempts to bomb ferries, before and after the sinking of Super Ferry 14, were frustrated by the Philippine authorities. However, the threat of terrorist groups planting bombs on ferries is very real, both in Southeast Asia and beyond. Thus, future maritime threats to ships will not only be from surface and underwater attacks but also from carrying a bomb on board a ship.

Lessons Identified

Most guerrilla and terrorist groups learn incrementally. Most groups are not innovative but imitative. Contrary to the prevalent view, they learn both by emulation and technology transfer. More than the direct transfer of technologies, they copy technologies, tactics, and techniques. For instance, Al Qaeda's attack on USS *Cole* was a copycat of LTTE's attack on *Abheetha*, a Sri Lankan navy supply ship. On May 4, 1991, *Abheetha* was anchored 6 miles north of Point Pedro, northern Sri Lanka, when an explosives-laden suicide boat rammed it. The attack caused extensive damage to the ship, and killed six and injured 18 naval personnel. The LTTE maritime suicide wing (Black Sea Tigers) members Captain Sithambaram and Capain Jeyanthan were also killed.

Similarly, it is very likely that one attack inspires another. After the alarm and publicity generated after Al Qaeda's attack on the USS *Cole* on October 12, 2000, many terrorist and guerrilla groups became interested in mounting attacks in the maritime domain. Within a month of the USS *Cole* suicide bombing on October 12, the terrorist "copycat effect" was demonstrated. LTTE suicide stealth boats breached the defenses of Trincomalee, the most protected Sri Lankan naval port, and destroyed a fast personnel carrier on October 23; and a Palestinian Hamas suicide boat attacked an Israeli naval craft on November 7, 2000. As the bomber detonated prematurely, only the skin of the Israeli craft was damaged.

To attack maritime targets, terrorist groups build their support and operational infrastructures on land, not at sea. Thus, the logical starting point in preventing future maritime attacks is to disrupt and degrade the terrorist infrastructure on land. The USS *The Sullivans*, USS *Cole*, MV *Limburg*, and several other case studies demonstrate that both maritime terrorism and piracy should be fought on land. As the terrorist and criminal infrastructure and personnel are based on land, they can be identified and targeted much more effectively by law enforcement and intelligence services operating on land. The failure to detect the planning and preparations of a maritime terrorist or piratical attack on land will lead the terrorist group or the criminal group to successfully launch the maritime attack. In a maritime terrorist or piratical attack, the time the terrorists and pirates spend out at sea is a few minutes. Unless the method, the place, and the exact time of the attack is known, it is not possible to interdict a maritime terrorist or piratical attack out at sea. As such, the maritime police units and navies have a very limited opportunity to successfully respond to maritime terrorism and piracy.

Conclusion

Most threat groups exploit the maritime domain for support, not offensive operations. More groups are interested in developing and expanding their range of maritime capabilities. Over time, most threat groups with access to water move from conducting support operations to guiding surface and underwater attack capabilities. Traditionally maritime terrorist technologies originated in the Middle East, but now they can be seen increasingly in Asia. In the coming years, the Asian threat groups are likely to innovate certain technologies and tactics that Middle Eastern groups are likely to copy.

Compared to the threat to aviation and land transportation, the threat from terrorism to naval ships and commercial shipping is medium to low. While the maritime assets are vulnerable to terrorist attack, the actual threat to maritime assets is medium to low for two reasons. First, very

few terrorist groups have the capabilities to attack maritime targets. Second, very few attractive maritime targets could be attacked without expending many resources. Although naval vessels can be protected by enhanced perimeter security, it is neither feasible nor cost-effective to protect every merchant vessel. An effective strategy for consideration by law enforcement and intelligence services should include (a) creating dedicated maritime counterterrorist commands to target terrorist groups with land-based maritime assets, (b) securing waterways used by ships operating in areas where terrorist and criminal groups are active, and (c) protecting cruise liners, oil tankers, LNG and LPG carriers, and other vessels transporting strategic cargo operating in areas where terrorist and criminal groups are known to be active.

The threat of a maritime attack is of low probability. Depending on the target attacked, the consequences can be medium or high. As 95 percent of the world's trade moves by sea, even if ten vessels are attacked in a single day, shipping will continue. Certainly the rising insurance premiums and investment in security will increase the cost of transportation and goods. However, the dependence of nations on the maritime environment percent or trade and commerce is of such paramount consideration that governments and the private sector will not seek alternative modes of transport. If the number of maritime attacks increases, governments and the private sector will invest excessively in securing the maritime domain. As of today, most of the investment to secure the maritime domain is driven by fear, not by an understanding of the threat.

WMD Proliferation: The Nexus between State, Nonstate, and Antistate Actors

Dr. Mohan Malik
Professor, Asia-Pacific Center for Security Studies

There is a great deal of pessimism on the WMD (weapons of mass destruction: nuclear, biological, and chemical) proliferation issue. The norms and rules that governed the nuclear road during the Cold War seem irrelevant. The era of nuclear multipolarity is already with us in what is still a unipolar world. Nuclear weapons continue to be seen as a security asset rather than a security liability. More countries are exploring uranium enrichment and nuclear power programs that could be diverted to produce weapons. The International Atomic Energy Agency (IAEA) chief warned recently that as many as 30 countries could soon have technology that would let them produce atomic bombs in a very short time. Many believe that the world is on the threshold of a dangerous nuclear arms race.¹ Major-power rivalries are intensifying. Nearly all nuclear weapon states (NWSes) are developing new generations of nuclear weapons, revising nuclear doctrines, upgrading delivery systems, or increasing the number of nuclear weapons in their stockpiles.

Post-Iraq, post-A. Q. Khan affair, the United States suffers from a serious credibility problem on the proliferation issue. Post-Iraq, the United States is seen as lacking both the clout and the credibility to build a broad international coalition that would dissuade countries from going nuclear. Moreover, the United States is trying to put out the fire with the help of those who started the fire in the first place. But they do not share the U.S. perceptions of the proliferation challenges. What the West sees as a breakdown in nonproliferation is seen by others as a legitimate push for national security. As is well known, America's rogue model is someone else's role model. Those states and nonstate actors that want to end the U.S. hegemony will not give up. Proliferation and terrorism are their only weapons in this struggle. For example, as far as North Korea is concerned, the biggest issue for the United States is proliferation, but for China the biggest issue remains stability (and Taiwan). The Chinese and the Russians are also happy that those who want nuclear weapons share their primary objective of limiting U.S. power worldwide. Beijing and Moscow are more interested in having profitable commercial ties with nuclear wannabes and in curbing U.S. unilateralism than in doing anything substantive to curb proliferation. But the proliferation challenge cannot be met in the absence of great-power consensus, which is surely lacking on North Korea and Iran. The growing perception is that the major Western powers or the P-5 no longer have the stomach, or the unity, to impose sanctions or take military action against rogue, proliferating states. This perception has prompted several nuclear abstainers (and others who gave up their nuclear programs after the end of the Cold War) to reconsider their nuclear posture. This group includes Australia, Japan, Taiwan, Brazil, South Africa, Saudi Arabia, and Egypt.²

The global nonproliferation regime, based on the 1967 Nuclear Non-Proliferation Treaty (NPT), seems to be unraveling.³ The 2005 NPT Review Conference ended in utter failure. And

-
1. George Jahn, "More Nuclear Worries," *Philadelphia Inquirer*, October 17, 2006; William J. Broad and David E. Sanger, "Fraying of Old Restraints Risks a Second Nuclear Age," *New York Times*, October 14, 2006; Dafna Linzer, "Optimism Turns to Anxiety on Curbing Nuclear Arms," *Washington Post*, November 3, 2006, p. 23.
 2. Andrew Grotto, "Who's Next to Go Nuclear?" *Washington Post*, October 15, 2006, p. B03; "Nakasono Proposes Japan Consider Nuclear Weapons," *Japan Times*, September 6, 2006.
 3. Brooks Tigner, "EU: Nonproliferation Efforts in Jeopardy," *Defense News*, September 18, 2006, p. 4.

the failure of the 2010 NPT Review Conference could have serious proliferation and geopolitical consequences. Treaties and regimes that fail to adapt or change with changes in the international power structure fall by the wayside. The rise of new powers and their quest for multipolarity, nonstate actors, forces of globalization, growing energy use in the age of global warming, and technological developments are adding new challenges to the regime. This paper examines WMD proliferation by state and nonstate actors and, more importantly, the nexus between them. It outlines the key features of the “Second Nuclear Age” before focusing on WMD terrorism by nonstate and antistate actors. It concludes with a discussion of counterproliferation measures to strengthen the regime and prevent a nuclear catastrophe.

Proliferation by States: First- and Second-Tier Horizontal Proliferation

For the purposes of analysis, I divide horizontal proliferation into three tiers: first, second, and third tiers. The commitment of the three old NWSes to the cause of nonproliferation is doubtful. When it comes to their friends and allies, they have either turned a blind eye or actively supported proliferation, in violation of their NPT commitments. National interests, balance-of-power considerations, and alliance commitments always override international treaty commitments. While Russia helped China’s and Iran’s nuclear programs, the United States turned a blind eye to Israel’s and Pakistan’s nuclear weapons quests during the Cold War years. For China, WMD proliferation remains an important tool of Beijing’s “containment through proxies” strategy: China has long used nuclear and missile proliferation to pressure the United States to curb its arms sales to Taiwan and contain its Asian rivals (Japan and India) by arming North Korea and Pakistan. But the Chinese are not alone in the proliferation business anymore. They are now in the dubious company of the second-tier nuclear powers that are equally busy in the proliferation business. In fact, the Chinese have been thoroughly beaten in the proliferation game by their own former clients and allies. Long-time recipients of Chinese WMD technology, second-tier proliferators (such as Pakistan and North Korea) are now proliferating to third-tier nuclear aspirants (such as Iran, Saudi Arabia, Syria, and Burma). Proliferation through networking among second- and third-tier nuclear states has opened the Pandora’s box that has the potential to unravel the nonproliferation regime. The new challenge thus comes from “within” the NPT, as member states (such as North Korea, Iran, and Brazil) abuse their access to nuclear capabilities.

Third-Tier Proliferation

What we need to worry more about is proliferation encounters of the third kind. Third-tier proliferation takes place through the brotherhood of rogue states and nuclear networking among nonnuclear NPT member states, private-sector companies, scientists, technicians, and terrorists that operate a kind of “Nuclear Wal-Mart.” As the A. Q. Khan saga illustrates, if the price is right, everything is up for sale. A sort of “yellow pages” directory exists for the supply of Chinese A-bomb designs, nuclear materials, technical expertise, and after-sales service, from North Korea to North Africa and northern Europe. The IAEA believes that the Khan nuclear network has not been completely dismantled. A combination of “rogue state” and mass-casualty terrorists is a worst-case scenario that has shaped the Bush administration’s security policy toward Iraq, Libya, North Korea, and Iran. This concern was expressed in the *Quadrennial Defense Review* released on February 6, 2006: “The prospect that a nuclear capable state may lose control of some of its weapons to terrorists is one of the greatest dangers the U.S. and its allies face.” While it is true that no nation would dare launch a nuclear attack for fear of reprisal, it is equally true that rogue states have, can, and will use terrorists as proxies. The conventional wisdom is that the chances of a state intentionally providing nuclear weapons to a terrorist organization are very low, because every nuclear device has a signature that can be traced back to the state of its origin, and that would invite massive retaliation. But in reality, tracing the origin of

radioactive material is not so easy. It is a scientifically complicated and time-consuming process. Besides, when there are only five or nine nuclear powers from whom such bombs can be directly acquired, as of today, it may be difficult. However, as more and more countries build the bomb, tracing the originator/seller will become harder and harder, and the incentive to make a sale will increase. Then there is the prospect of a nuclear weapon state losing control over its arsenal, through seizure, subversion, or sabotage by terrorists.

The China Connection

Of all the five declared NWSes, China continues to be instrumental in fueling proliferation crises large and small, imminent and somewhat more distant. In fact, very few second- and third-tier nuclear weapons programs have not directly benefited from China's assistance. Unfortunately, with the exception of Libya and Iraq, such cooperation continues to date.⁴ During the last two decades, Chinese airspace, military airfields, and ports have been used to transport WMD and related technologies between Pakistan, North Korea, Iran, and Saudi Arabia. Apparently, the A-bomb design that A. Q. Khan delivered to the Libyans in the shopping bag of his Islamabad tailor was of a Chinese nuclear weapon tested on October 27, 1966. The Chinese government has not explained how the nuclear warhead design documents reached Libya. It is inconceivable that Chinese security agencies were unaware of Pakistan's nuclear dealings with North Korea, Saudi Arabia, Iran, and Libya.⁵ The *2004 Report to the Congress of the U.S.-China Economic & Security Review Commission* highlighted the consequences of China's dangerous liaisons with rogue regimes that have made it easier for nonstate actors to acquire WMD:

The consequence of more than 20 years of China's direct transfers of WMD and related technologies is that the United States now faces enhanced threats from rogue states or terrorist groups that can acquire WMD capabilities. Unfortunately, even in light of overwhelming evidence of the increased threat to global security, *Chinese entities continue to proliferate*.⁶

While Beijing has taken important steps to strengthen its nonproliferation laws and policies, unacceptable proliferant activity still continues. The dominant view on China's proliferation activities is that the worst is behind us and that China has now completed the transition from a challenger to an upholder of the global nonproliferation regime. However, long-time China watchers see little or no evidence of Beijing's abandoning its national security strategy based on the principle of "containment through surrogates" that requires proliferation to countries that can countervail its perceived rivals and enemies. I argue that to serve its broader national security interests China has very cleverly played "the proliferation card" by exploiting loopholes in the nonproliferation regime and contradictions in major power relationships. Despite China's membership in the NPT, Nuclear Suppliers Group (NSG), Missile Technology Control Regime (MTCR), and other control regimes, China continues to provide nuclear/missile assistance to its friends and allies (Pakistan, Iran, and North Korea) when doing so undermines the security of China's perceived enemies (India, the United States, and Japan). Put differently, Chinese foreign policy objectives with respect to Taiwan and Pakistan, Beijing's desire to maintain the

4. Shirley A. Kan, "China and Proliferation of WMD and Missiles: Policy Issues," *Congressional Research Service* (Library of Congress Report, Order Code RL31555, updated August 8, 2006). <http://www.fas.org/spp/starwars/crs/RL31555.pdf>.

5. Mohan Malik, "A. Q. Khan's China Connection," *China Brief* 4, Issue 9, April 29, 2004, pp. 3–5; *China, Pakistan, and the Bomb: The Declassified File on U.S. Policy, 1977–1997*, <http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB114/press.htm>.

6. "China's Proliferation Practices," *2004 Report to the Congress of the U.S.-China Economic & Security Review Commission*, 108 Congress (Washington: U.S. Government Printing Office, June 2004), pp. 123–150.

status quo on the Korean Peninsula, and its goal to end U.S. hegemony (or unipolarity) override any interest in pursuing nonproliferation objectives. Therefore, it is not a sheer coincidence that the United States, Japan, South Korea, and India—countries that either see China as their rival or have had strained ties with China—find themselves subjected to nuclear blackmail, terrorism, intimidation, and coercion by countries—Iran, North Korea, Pakistan—that happen to be China's key friends and allies.⁷

The 2006 Report to the Congress of the U.S.—China Economic & Security Review Commission accused China of failing “to meet the threshold test of international responsibility in the area of non-proliferation” by aiding Iran's nuclear, missile, and chemical programs and refusing to effectively use its leverage to bring North Korea back into nuclear weapons negotiations. The report concluded that “despite its rising power and wealth, China may not be willing or ready to play a responsible role in an international system aimed at encouraging peace and stability.”⁸ It noted that China in recent years has allowed the transfer of weapons and technology across its territory from North Korea to Iran: “From April to July 2003, China reportedly gave overflight rights to Iranian IL-76 cargo planes that flew to North Korea at least six times to pick up wooden crates suspected of containing cruise missiles. But after a U.S. protest in June 2005, China denied overflight rights for an Iranian plane departing from North Korea.” Nonetheless, North Korean overflights to Pakistan, Burma, and other countries continue. The repeated imposition of U.S. sanctions against Chinese entities for proliferation activities has not deterred “serial proliferators” that “have no fear of government controls or punishments.”⁹ China has also refused to join the U.S.-led Proliferation Security Initiative (PSI), which raises questions about whether China will cooperate in a United Nations embargo against North Korea.¹⁰

China is reportedly conducting biological and chemical weapons research in violation of Biological Weapons Convention and Chemical Weapons Convention obligations. Furthermore, Beijing's nuclear force expansion and modernization programs have accelerated in recent years. China's third-generation nukes will be far more mobile, accurate, and reliable than its existing arsenal. As in the past, as China develops newer weapons, it might pass on older ones to its friends and allies. There has long existed a wide gap between China's words and deeds on the nonproliferation subject.

The WMD Proliferation *Modus Operandi*: The Nexus between State and Nonstate Actors

Despite all the hype over nonstate actors, the reality is that nonstate actors can neither exist nor survive without some degree of state support. Unlike terrorism, proliferation certainly does not take place without state support. For example, A. Q. Khan did not buy intermediate-range ballistic missiles from North Korea to protect his numerous residential properties in Islamabad but to protect the Pakistani state. He was only implementing an agreement brokered by the Chinese that former Prime Minister Bhutto had signed during her Pyongyang visit in 1993. A. Q. Khan worked for the glory of the Islamic *ummah*. There is a nexus between state and nonstate actors, and the proliferation *modus operandi* is surprisingly very similar. It passes through four stages:

-
7. Mohan Malik, “The Proliferation Axis: Beijing-Islamabad-Pyongyang,” *Korean Journal of Defense Analysis* XV, no. 1, Spring 2003, pp. 57–100; Justin Bernier, “China's Strategic Proxies,” *Orbis* 47, no. 4, Fall 2003, pp. 629–643.
 8. Carol Giacomo, “China's Role in Peaceful World Questioned,” *Reuters*, October 31, 2006.
 9. Bill Gertz, “Congressional Study Cites China as Nuc Supplier to North Korea,” *Washington Times*, October 31, 2006.
 10. Alexa Olesen, “Why China Reluctant to Board Ships of N. Korea,” *Philadelphia Inquirer*, October 18, 2006.

- First, complete denial and protestations of innocence.
- Second, when that becomes unsustainable, denial of state sponsorship and direct involvement.
- Third, responsibility is shifted to “renegades,” and blame is put on some rogue individuals or nonstate actors; this is followed by some token action against them.
- Finally, when sanctions are imposed, some stronger action is taken (in the form of making new policy guidelines, blaming previous administrations, and “sacrificing” some “bad apples”), and new assurances are made that “past proliferation activities have now been completely and permanently shut down.”

Whether it is China or Pakistan, this cycle is repeated with each new nuclear revelation.

The “Second Nuclear Age”: Major Characteristics

In his book *Fire in the East*, Paul Bracken argued that the “Second Nuclear Age” began in 1998 when India, Pakistan, Iran, North Korea, and China upped the nuclear/missile ante.¹¹ This signaled the end of Western dominance of Asia, which began in 1498—500 years ago—with Vasco da Gama’s landing in India and the subsequent European colonization of Asia. In the “Second Nuclear Age,” the future of nuclear deterrence lies in multilateral rather than bilateral deterrence (as was the case during the Cold War), both at the interstate and nonstate actor levels.

At the interstate level, we are now moving toward multiple nuclear deterrence games. The key features of the “Second Nuclear Age” include:

- (a) New global nuclear balance of power (United States–Russia–China)
- (b) New regional bilateral nuclear balances (China and India; India and Pakistan; North Korea and Japan; Israel and Iran)
- (c) From bilateral to trilateral (China-India-Pakistan) and multilateral (United States–China–Russia–India–Pakistan–North Korea–Iran) complex and unpredictable nuclear deterrence games
- (d) The dangers of nuclear gang-ups (Pakistan and China versus India, or an India-Israel nuclear alliance versus the China–Pakistan–Saudi Arabia nuclear axis)
- (e) Nuclear blackmail (Iran, North Korea)
- (f) Nuclear ambiguity (Japan, Taiwan)
- (g) Third-tier proliferation (nuclear networking among nonnuclear NPT member states to reach “near-nuclear status”)
- (h) The Age of N-Revelations (South Korea, Taiwan); N-Breakouts (North Korea, Iran); N-Temptations (Japan, Taiwan, Argentina, Australia, Brazil, Canada, South Africa, Egypt, Turkey)
- (i) The doctrine of preemption (United States versus Iraq; Israel versus Iran?)

In the “Second Nuclear Age,” China and India might compete with each other to offer extended nuclear deterrence umbrellas to their friends and allies just as the United States and the U.S.S.R. did during the Cold War. New potential blackmails appear on the horizon, because

11. Paul Bracken, *Fire in the East: The Rise of Asian Military Power and the Second Nuclear Age* (New York: HarperCollins, 1999).

deterrence, like beauty, lies in the eye of the beholder. Sudden, unexpected nuclear crises could emerge between new nuclear powers. If the past is an indicator of the future, it is worth remembering that the world came very close to nuclear catastrophe several times—through accidents and near uses—even when only so-called “responsible” P-5 state actors were involved. We cannot be 100 percent sure that nuclear weapons will never be used again. Nuclear weapons matter as weapons of coercion and blackmail and as bargaining chips. Therefore, new concepts, new models, and new theories are needed to manage the complex multilateral nuclear power balances of the future.

At the nonstate actor level, the old theories of arms control and deterrence cannot deter new threats posed by nonstate actors because only nation states are parties to arms control agreements, not nonstate actors. Nonstate actors thus add a whole new dimension. Deterrence works against people who want to live, not against those who want to die. So stopping terrorists without an address is much more difficult than deterring North Korea, Pakistan, or Iran, which have targets of value, including capitals and leaders. That’s the crux of the problem we face today. In the movie adaptation of Tom Clancy’s *The Sum of All Fears*, neo-Nazis get their hands on a lost atom bomb and Baltimore goes up in smoke. That’s one scenario. At the nonstate-actor level, the breakup of states also creates the danger of WMD falling into the hands of separatists and fanatics. We cannot rule out the possibility of a civil war fought with nuclear weapons. If there were two rival factions in Pyongyang or Islamabad, for example, the international community would be forced to support the side that controls nuclear forces. One can imagine a scenario in which the Saudi government fragments and control over nuclear weapons, should the Saudis have acquired them, falls into the hands of Saudi power-brokers who are supporters of Osama bin Laden, or who are at least sympathetic to his ideas.

WMD Terrorism: Why Worry?

There are several reasons for worrying about WMD terrorism. Nuclear terrorism, in particular, appeals to groups seeking spectacular, dramatic, and psychologically potent results and wreaking massive socioeconomic damage on the enemy. Countries that go nuclear often find themselves subjected to terrorist wars or low-intensity conflicts (LIC), because nuclearization rules out the option of waging conventional interstate wars. Faced with advanced technology, the nature of war changes. This is what military historian Martin Van Creveld means by the “transformation of war.” So nuclearization is one of the root causes of terrorism.

Nuclear terrorism acts range from distributing small amounts of radioactive material by mail to “dirty bombs,” improvised nuclear devices (INDs), or an intact nuclear weapon (INW) stolen from a state arsenal or gifted/sold by “rogue states.” There is fear that some “states of concern” (e.g., North Korea or Pakistan or entities within them) might give or sell nuclear weapons or materials, if they have not already done so. In addition, there is the danger of unauthorized assistance from scientists or custodians of nuclear weapons or seizure of nuclear weapons during civil war, coup, and chaos in a nuclear-armed failing state. While no terrorist groups have yet resorted to nuclear terrorism, there is worry that lack of attention and action by states increases the terrorist risk unnecessarily. An Islamic state or terrorists might be tempted to use nuclear weapons against Israel, India, or the United States in the belief that the assured retaliation against the Muslims would serve its cause of uniting the entire Islamic *ummah* against its enemies.¹²

There have long been concerns about the Russian, Pakistani, and North Korean nuclear stockpiles. A thriving black market already exists in nuclear materials and terrorists in Europe, and Central and South Asia have been found with WMD literature. al-Qa‘ida, Chechen separatists,

12. Noah Feldman, “Nuclear Holocaust: A Risk Too Big Even for Martyrs?” *New York Times*, October 27, 2006.

the Islamic Movement of Uzbekistan, and other jihadi organizations are on the lookout. Seizures of smuggled radioactive material capable of making a terrorist “dirty bomb” have doubled in the past four years in Europe. Smugglers have been caught trying to traffick dangerous radioactive material more than 300 times since 2002, according to the IAEA figures.¹³ As nuclear power becomes more attractive to developing countries, Argentina, Australia, Brazil, Canada, and South Africa are expressing interest in enriching uranium to sell on the world market. Growing reliance on nuclear energy, in turn, increases the potential for nuclear terrorism.

Furthermore, with relatively little radioactive material obtained from a power plant or medical facility, terrorists could construct a “dirty bomb” or a radiological dispersion device (RDD) or radiation emission device (RED). A group with a few thousand dollars could obtain radioactive material. Technical information necessary to build a functional nuclear weapon is widely available. The secret of the bomb is no longer a secret. The social, economic, and psychological effects of a dirty bomb would be more serious than its physical or radiological effects.

Increasing interest in exploiting biological and chemical agents for mass deaths by terrorist organizations is another cause for worry. And last but not least, attacks against and sabotage of nuclear power plants could result in the release of large amounts of radioactivity. The fear is that al-Qa’ida-type groups might be planning an attack even more lethal than those of 9/11. The 9/11 attacks cost the world economy \$3 trillion. A nuclear 9/11 would cause a global economic depression and widespread chaos and panic. Some governments might fail to cope with the threat and surrender to terrorists’ demands, while others would fall.

A Nuclear 9/11

Attacks against and sabotage of nuclear power stations, causing the release of large amounts of radioactivity, is a plausible scenario. A 9/11-style attack on a nuclear installation would have a devastating impact, far worse than the Chernobyl (1986) and Three Mile Island (1979) accidents. There are about 440 commercial nuclear power reactors in more than 30 countries. Security at most nuclear research reactors is very limited, making them easy targets. Attack modes include airplane crashes; commando raids by land, water, or air; or cyber attacks. Diagrams of power plants have been found in terrorists’ hands. Khalid Sheikh Mohammed and Ramzi Binalshibh, two organizers of the 9/11 attacks, acknowledged that they had thought of striking nuclear power plants but did not do so for fear that the attack could “get out of control.” Recently, police in Canada (2003), Britain (2004), Australia (2005), and India (2006) claimed to have foiled planned attacks on nuclear reactors by arresting several people with links to *jihadi* organizations.¹⁴

Who Can Do It?

Charles Ferguson and William Potter identify four types of nonstate actors that might pursue nuclear terrorism (Table I).¹⁵ These groups have different political aims, geopolitical contexts, technical capabilities, and psychological and religious motivations. Although most terrorist groups are not going to use WMD, the open-source data show a growing interest by terrorists in WMD weapons and materials. First are the *apocalyptic groups* that are so fed up with this unholy world that they just want to blow it up. Religious extremist groups, such as Aum Shinrikyo

13. Lewis Smith, “Smuggled nuclear waste cases double,” London Times, October 7, 2006; “Radiological Material for 5 “Dirty Bombs” Recovered in Chechnya,” *Moscow News*, August 4, 2006. <http://www.mosnews.com/news/2006/08/04/dirtybombs.shtml>

14. In August 2006, India, fearing a missile attack by terrorists, placed its nuclear installation near Bombay on a war footing. See Manoj Joshi, “Why BARC beckons the terrorist,” *Hindustan Times*, August 12, 2006, p.1.

15. Discussion here relies on Charles Ferguson and William Potter, *The Four Faces of Nuclear Terrorism* (New York/London: Routledge/Taylor & Frances, 2005).

(which carried out the nerve-gas attack on the Tokyo subway in 1995) and David Koresh, believe that the end of the world is close and they want to purify this world via violent upheaval. These groups, driven by religious passion, are usually led by charismatic but paranoid leaders who can use WMD.

The second category is that of *nationalist/separatist groups* (such as Sri Lanka’s LTTE, Russia’s Chechens, India’s Kashmiris, China’s Uighurs, the Kurds in Turkey, and the Maoists in Nepal) fighting for homelands or autonomy, which will not turn to nuclear terrorism because their desire for domestic and international support serves as a major constraint against acts of mass violence. Third are *single-issue groups*, which are mostly misfits or fundamentalist crazies such as proenvironmentalists, animal liberation activists, antiabortion advocates, and even the antinuclear movement. They may turn to lesser forms of terrorism, such as radiological dispersion devices, or even nuclear hoaxes, much the way anthrax hoaxes have been used to disrupt abortion clinics. Such groups, however, would not engage in mass destruction.

Table I
Nonstate Actors That Might Pursue Nuclear Terrorism

	PROBABILITY
<i>Apocalyptic Groups: “Unholy World”</i> Extremist religious groups such as Aum Shinrikyo, David Koresh . . .	High
<i>Nationalist/Separatist Groups: “Homelands”</i> Chechens, Kashmiris, Uighurs, the Kurds, LTTE . . .	Very Low
<i>Single-Issue Groups: “Misfits”</i> Antinuclear and proenvironment groups, animal liberation, antiabortion advocates . . .	Low
<i>Anti-State Actors: Extremist Ideologies of Holy Warriors</i> Al-Qa‘ida, LeT, Jamat-ul-Dawa, Int’l Islamic Front, Hezbollah, Jamaiah Islamiah . . .	Very High

Fourth are *anti-state actors* or *politico-religious extremist organizations*, in the business of waging “holy wars” in this “unholy world,” that have the propensity for mass-casualty terrorism. Seeing violence as a sacred divine duty, they lack any political and moral constraints. Post-9/11, al-Qa‘ida, Lashkar-e-Toiba, Jamat-ul-Dawa, Jamaiah Islamiah, Hezbollah, and other “antistate” actors are of primary concern. An “antistate actor” is defined as an extremist religious ideology or ideological movement with political objectives that seeks to establish global supremacy and advocates the complete destruction of the modern state system through unconventional warfare, including the use of weapons of mass destruction. Comintern, with its goal to establish a global communist utopia during the early Cold War years, and al-Qa‘ida today, with its stated goal to establish a worldwide pan-Islamic caliphate, fit this description. Unlike other nonstate actors, “antistate actors” such as al-Qa‘ida do not accept the primacy and legitimacy of the nation states in the international system. They believe in the sovereignty and preeminence of the *ummah* [the world Islamic community], which overrides state loyalty and state sovereignty. The main point here is that the number of organizations highly motivated to use WMD is very small but not zero. And it’s always those in small numbers that cause all the bloodshed and wars and wreak havoc. The conflicting perspectives between state and antistate actors on nuclear weapons and their use are summarized in Table II.¹⁶

16. For details, see Mohan Malik, “The Clash between State & Anti-State Actors,” *Asian Affairs* 30, no. 3, Fall 2003, pp. 177–199.

Table II
The State versus the Antistate: Nuclear Peace versus Nuclear Jihad

THE STATIST'S PERSPECTIVE	THE ANTISTATE-ACTOR'S PERSPECTIVE
State security and survival are paramount. One of the main prerogatives of state actors is to ensure the maintenance of their territorial integrity.	Islam's spread and survival are of paramount importance. State security or national survival is irrelevant because the very idea of separate nation states is an anathema to antistate actors.
Nuclear weapons are meant to ensure territorial integrity and national independence.	The nation state is not indispensable. The destruction of the modern state system may well be a prerequisite to the creation of <i>Dar-ul Islam</i> .
Nuclear weapons are to be acquired when the very survival of the nation state is seen as at stake.	"It is the religious duty of all Muslims to acquire nuclear, biological and chemical weapons to terrorize the enemies of Allah."— <i>Osama Bin Laden</i>
Nuclear weapons are weapons of deterrence, not weapons of war.	All weapons, including WMD, are usable weapons to achieve victory over nonbelievers and enemies of the faith.
Nuclearization brings an end to map-making exercises and freezes the territorial status quo. Nuclear weapons may be of little use in wresting politico-military concessions from others.	Nuclearization paves the way for waging low-cost, low-intensity conflict/terrorist wars without fear of retaliation and can help in settling territorial disputes on favorable terms via coercion, subversion, and blackmail.
The resolution of the Palestinian and Kashmir disputes will lead to peace and stability.	Their resolution will bolster the Islamic <i>ummah's</i> resolve and cause in Chechnya, Xinjiang, Mindanao, southern Thailand, Indonesia, India, Nigeria, Europe, and North America . . . and eventually pave the way for the creation of a pan-Islamic caliphate.
"Pakistan's nuclear weapons are India-specific only."	Pakistan's "Islamic bomb" should be used to defend the broader interests of the entire Muslim <i>ummah</i> .
Nuclear weapons are the "crown jewels" and symbols of a strong state.	Al-Qa'ida is not concerned with the nukes' status-symbol value, as they need weak, failing, and war-torn states to thrive and accomplish their objectives.
A nuclear war must never be fought. The taboo on the nonuse of nukes must not be broken.	There is absolutely nothing to fear from a nuclear war.

Al-Qa'ida and WMD Terrorism

For the foreseeable future, al-Qa'ida and its affiliated organizations are the group most likely to use WMD terrorism. This is so because al-Qa'ida's goal is not the creation of a separate homeland, but conversion of non-Muslims to Islam. Al-Qa'ida sees itself fighting the enemies of Islam wherever in the world they are. It seeks to expand the frontiers of Islam and double the Organization of Islamic Countries' (OIC) membership from 57 to 100 plus. Al-Qa'ida wants to establish a new pan-Islam-dominated world order in which the West is driven out of the House of Islam, moderate Muslim regimes are toppled, and a global Islamic caliphate based on Shari'ah is established. The Islamic discussion of nuclear weapons is intertwined with the concept of suicide bombing. Creating mass casualties to obtain maximum media coverage of the devastation comes naturally to them. These jihadis are natural-born killers.

Al-Qa'ida's leadership has long expressed an interest in WMD. In 1998, Osama bin Laden called it a "religious duty" to acquire nuclear and chemical weapons "to terrorize the enemies of Allah." His position has been confirmed by others, including the Saudi radical cleric Sheikh Naser bin Hamad al-Fahd, who issued a fatwa on May 21, 2003, endorsing the use of WMD,

titled “A Treatise on the Legal Status of Using Weapons of Mass Destruction against Infidels” [*Risalah fi hukum istikhdam aslihat al-damar al-shamel didh al-kuffar*]. The fatwa document explicitly claims a justification in Muslim religious tradition for using “nuclear, chemical, or biological weapons.” One quotation illustrates its general tenor: “If a bomb that killed ten million of them and burned as much of their land as they have burned Muslims’ land were dropped on them it would be permissible, with no need to mention any other argument.” In sum, al-Qa’ida has a clear religious-political agenda. It is in for the long haul. Its struggle has roots that go back to the Crusades almost a millennium ago. On several occasions, al-Qa’ida operatives have tried (albeit unsuccessfully) to acquire nuclear materials over the past decade. The example of Abdullah al-Muhajir (Jose Padilla) is a case in point. Documents found in Afghanistan show that while al-Qa’ida’s efforts were far less sophisticated, it is determined to get nuclear weapons. Al-Qa’ida’s ideology, goals, public statements, and actions all indicate they would conduct nuclear attacks if they had them. Likewise, if Hezbollah had a suitcase nuclear bomb, they would certainly use it against Israel.

Why Hasn’t It Happened Yet? Disincentives for the Pursuit of WMD Terrorism

The aforementioned discussion of worst-case scenarios relating to WMD terrorism might raise the question: why hasn’t it happened yet? Fortunately, to date, no nuclear detonations have occurred, nor have there been any “dirty bomb” attacks. Analysts attribute this to four key reasons:

1. Implementation challenges
2. Response (massive retaliation) fears
3. Philosophical or moral issues
4. Insufficient capability.

First of all, the War on Terrorism has certainly disrupted al-Qa’ida operations, removed safe havens (Afghanistan), and disrupted financing activities. Some experts argue that al-Qa’ida might have succeeded in its objective if it had controlled Afghanistan for a few more years. Besides, new airport, port, and border security measures have been taken. Radiation sensors are being installed at ports all over the world. Some argue that the risk of terrorists using chemical and biological weapons (CBW) has been exaggerated. To date, there have been very few cases of CBW use by nonstate actors. A major reason is that the effects produced by CBW are usually delayed and spread over time. This works against their use by terrorists who want spectacular, massive impact through their attack and instant worldwide publicity, shock, and awe through such attacks. The March 1995 attack by Aum was not very effective: it resulted in 12 deaths and 1,000 injured. The low number of casualties highlights the limitations of terrorism involving chemical weapons.

Secondly, “the response factor” or massive retaliation fears also work against WMD’s actual use. This is borne out by the testimony of two organizers of the 9/11 attacks, who contemplated striking nuclear power plants but did not do so for fear that “the attack could get out of control.” A good example of the moral and philosophical constraint is the case of Chechen separatist rebels who placed an RDD containing cesium-137 in a Moscow park in 1995. A Chechen rebel leader had second thoughts and soon alerted the media, and the bomb was never detonated. Finally, building nukes is not easy. It requires massive resources invested over decades. Japanese sect Aum Shinrikyo spent half a decade acquiring nuclear weapons, but turned to chemical weapons after it failed to become history’s first nonstate nuclear power.

What Can We Do to Prevent a Catastrophe?¹⁷

Cracks in the global nonproliferation regime have been evident for a long time as a result of a variety of pressures. Can the NPT, based on the power realities, principles, and norms of the mid-twentieth century, curb proliferation in the early twenty-first century? The regime works on the principles of assurance, persuasion, dissuasion, and coercion, but if any country is caught violating nonproliferation treaties, there is no punishment. The UN just cannot enforce compliance and punish the violators. In theory, the UN Security Council (UNSC) could act against the violators, but the UNSC itself suffers from a crisis of legitimacy. Besides, nothing can be done if one or more P-5 nuclear powers choose to undermine the regime. More often than not, the P-5 act only if their vital national interests are affected. In the absence of great-power concert, WMD proliferation seems unstoppable. To make matters worse, the IAEA does not have the organizational capacity to catch those cheating in time. The examples of China, North Korea, Libya, and Iran also show that signing the NPT or Comprehensive Test Ban Treaty does not mean that a country will not proliferate. When confronted with violating the treaty, North Korea simply walked away from it without any punishment. Now Iran is threatening to do the same. The general consensus is that the IAEA needs much stronger verification power and the UNSC needs to take bolder and complementary action to reverse the previous decade's growing trend of proliferation.

There is no option but to strengthen and reinforce the existing regime with new global agreements, norms, and understandings and shared responsibilities and obligations that will close loopholes and expand export controls, and, in particular, to bolster the NPT and the IAEA by adding new protocols and stricter verification. The NPT ought to be fine-tuned to achieve better balance between compliance with obligations and rights, between better nonproliferation controls and better guarantees of access to the fuel supply for peaceful purposes. Since proliferation does not take place without state support, there is a need to understand and undermine the nexus between state and nonstate and antistate actors. UNSC Resolution (UNSCR) 1540 is the first legal document that declares proliferation by nonstate actors to be a threat to international security. It calls for measures to secure vulnerable nuclear weapons, materials, and facilities against attack or sabotage worldwide and builds a global consensus or alliance against WMD terrorism. In this context, the Nunn-Lugar Cooperative Threat Reduction Program, the G-8 Global Partnership Against the Spread of Weapons and Materials of Mass Destruction, the Nuclear Terrorism Control Convention of 2004, and the 2006 Global Initiative to Combat Nuclear Terrorism are also welcome steps. These measures should be supplemented with steps to reduce the threat of "loose nukes," miscalculation, and accidents in South Asia, North Korea, and the Middle East by promoting effective command and control in new nuclear states (e.g., Pakistan). In addition, robust international mechanisms for information sharing and crisis management should be established. Improved counterterrorism measures (e.g., law enforcement and intelligence capabilities) and effective border security and airport and port security measures can curb illicit trafficking in WMD materials by antistate actors.

Since WMD technology is often carried by sea, post-9/11 fears of a "dirty bomb" being shipped into the country in a container prompted the Bush administration to establish the Container Security Initiative (CSI) and Proliferation Security Initiative (PSI), which seek to improve national and international capabilities for detecting and interdicting WMD technology and materials. Along with the controversial doctrine of preemption and development of missile defenses, the CSI and PSI constitute four important elements of the counterproliferation strategy that seeks to neutralize the threat posed by the nexus between rogue states and nonstate state actors by defeating, attacking, detecting, and interdicting WMD. However, 100 percent screening and detection is impossible, as there are still many holdouts who believe that counterproliferation

17. Graham Allison, *Nuclear Terrorism: The Ultimate Preventable Catastrophe* (N.Y.: Times Books, 2004).

measures violate national sovereignty and international law. While Russia and India remain ambivalent, China is the most important holdout. Indeed, China's horizontal and vertical nuclear proliferation policies will become a determining factor in shaping the "Second Nuclear Age" in the twenty-first century. In short, the threat of WMD terrorism is real. It could happen anywhere in the world (New York, London, Tel Aviv, Bombay, Brussels, Paris, Moscow). Prevention is the best option. We are in a race between catastrophe and cooperation that we cannot afford to let the other side win.

Irregular Warfare, Armed Groups, and the Long War: A New Analytical Framework

**Andrea J. Dew,¹ Research Fellow
Belfer Center for Science and International Affairs,
Kennedy School of Government, Harvard University**

Introduction

The end of the Cold War was heralded as ushering in a new era of world peace. The reality of the 1990s and twenty-first century, however, has been a rash of bloody internal conflicts that has stretched from Bosnia to Central Asia, across the Middle East, and throughout Africa.² Moreover, war since 1990, with the exception of Desert Storm and the first phase of Operation Iraqi Freedom, has been different from the modern Western understanding of armed combat.³ War has been unconventional and irregular. War has also been dominated by non-state armed groups.⁴ Conventional militaries, the United States included, have a poor track record in fighting these kinds of unconventional conflicts against unconventional foes.⁵ The insurgency in Iraq is illustrative of the dire consequences of not grasping these changes in the nature of global armed conflict.

The root causes of these unconventional conflicts are complex and often overlap, each cause exacerbating the other. In some areas in the world, weak, corrupt, and failing states are part of the problem.⁶ The end of the Cold War also unleashed powerful ethnic, ethnonational, religious, and communal differences; and identity differences between people have been manipulated by competing ethnic and religious elites to gain power. In other areas of the world, internal and transnational violence has been the route to state resources and power, secession, or group autonomy.⁷

Internal conflicts of the types we have seen in Somalia, Chechnya, and Bosnia, will continue to occur in the twenty-first century and will be characterized as follows: irregular conflict will continue to challenge state legitimacy and authority, and there will be a proliferation of armed groups motivated by national, transnational, and messianic principles. The internal wars of the twenty-first century will continue to have transnational and even global dimensions characterized by the irregular and unconventional use of force by various types of armed groups.⁸

In the past, however, the policymakers and military commanders of modern states—including the United States—have often failed to grasp the nature of this new battlefield. Indeed, for policymakers the perception is the reverse: that conventional warfare prevails and thus that the United States is more than adequately prepared to dominate the future face of war. Nothing could be further from reality. In the U.S. defense community, however, there are early signs that the threat from armed groups is being acknowledged. For example, the 2006 Quadrennial Defense Review (QDR) talks about the United States facing a “long war” that is “irregular in its nature.” The QDR also emphasizes that the enemies in this fight “are not traditional conventional military forces.”⁹ In this irregular warfare, current and future U.S. military missions will feature counterterrorism, counterinsurgency, and stability operations. In each, the main adversary will be an armed group—often more than one, as Iraq illustrates—which makes the importance of understanding the threat from armed groups even more salient.

Insurgents, Terrorists, and Militias: Who Are the Warriors of Contemporary Combat?

In order to fight an unconventional enemy, we must, as Sun Tzu exhorts, know our enemy; we must understand their capabilities, their concepts of warfare, their culture of war and peace; from this information, we can learn how they fight.¹⁰ In assessing non-state armed groups it is also important to remember that many have emerged out of tribal, clan, religious, and other traditional identity divisions. Thus, the starting point to such an approach is to develop an understanding of the cultural foundations of non-state armed groups. This can be achieved by understanding the values, institutions, and ways of thinking that persist generation after generation, and by understanding how culture and tradition influences the way armed groups think about, and fight, war.

The term “non-state armed groups” includes insurgents, terrorists, militias, and criminal groups. These armed groups are characterized by their ability and willingness to challenge the authority and legitimacy of states and even the international system, and they can attack within and across state boundaries, and even globally. Such groups operate through clandestine organizations, depend on intelligence and counterintelligence capabilities, and mask their operations through denial and deception. These transnational groups are enabled by globalization and information-age technologies; they employ violence in unconventional, irregular, and increasingly indiscriminate ways; and their operations often are not constrained by the laws and conventions of war. Moreover, their operations deliberately bypass the superior military power of nation states to attack political, economic, and symbolic targets.¹¹

Based on this assessment, the following new six-part framework for analyzing irregular warfare and non-state armed groups is proposed. Policymakers, intelligence analysts, and military planners should consider: (1) the armed group’s overall concept of warfare; (2) their organizational approach and command and control structure; (3) their area of operations; (4) the types and targets of operations; (5) the constraints and limitations on warfare; and (6) the role of outside actors. The remainder of this paper discusses each of these six aspects based on the experiences of conventional militaries and their unconventional foes in Somalia, Chechnya, Afghanistan, and Iraq, and the conclusions presented here provide a general overview of trends in irregular warfare. Moreover, the six-part framework can also be applied to individual non-state armed groups to assess their way of war and to develop nuanced and flexible counterstrategies for the “long war” ahead.¹²

1. Concept of Warfare

In assessing non-state armed groups, the first issue to address is the overarching concept of warfare for a group. Thus, it is important to consider these questions: What are the traditional concepts of war that persist over time, and to what extent are they relevant today? Why do these groups fight and what are the roles of honor, revenge, tribal and family loyalties, and religion in conflict? What are the methods—informal doctrine—of combat? What do those methods entail, and have they been adapted? To what extent are members versed in these modes of fighting?

An assessment of post–Cold War conflicts in Somalia, Chechnya, Afghanistan, and Iraq shows that traditional concepts of warfare still remain very relevant. Moreover, armed groups can not only execute operations based on these traditional ways of war but can also adapt them to the time and setting in which they are fighting. War in traditional societies can stem from a host of motivations that include honor, revenge, tribal and family loyalties, religion, and resistance to invasion or occupation. These long-established precepts of traditional warfare are not found in the doctrinal manuals that guide modern armies. But they can be deduced from armed group

narratives—stories of raids, ambushes, heroism, treachery, and victory passed down from generation to generation. It is possible to uncover these protracted, irregular, and unconventional principles through detailed study and observation of the culture and history of armed groups.

2. Organizational Approach—Command and Control

Second, to assess how non-state armed groups are organized to fight, it is important to consider their command and control structure. How do these armed groups organize to fight? To what extent is organization decentralized, based on local hierarchies, and focused on small units? Who commands, and what is the approach to leadership?

The answer to these questions can be derived from the cultural background and history of conflict of these groups. Tribal, clan, and religious warriors take orders from local leaders and are usually mustered into local units rather than a single centralized control center. The Afghan Mujahideen, for example, were mostly composed of local forces under the command of a local leader. Moreover, although the membership of armed groups can number in the thousands, they are organized to fight in small group units—no battalions here—and assembled for irregular operations, such as ambushes and hit-and-run strikes.

Traditional command and control systems have been adapted to modern weapons, new enemies, and the situational context. Moreover, the communal fighting units and command and control systems that persist in traditional societies can mobilize rapidly and adapt to fight modern foes. The transformation of the rural Chechen style of fighting to suit the urban canyons and Russian tanks in Grozny is another example of this adaptation.

3. Area of Operations

The next issue to consider in assessing non-state armed groups is their area of operations (AO). This can be local, regional, or global, and it is important to understand whether the AO is still rural or if armed groups have adapted to urban situations. Moreover, since many non-state armed groups operate in states with weak, failing, or failed central governments, it is also important to consider whether their AO is in ungoverned territory and whether these areas are off-limits for government forces.

In Somalia, Chechnya, Afghanistan, and Iraq, traditional warriors have capitalized on superior local knowledge of the social setting, terrain, and enemy activities. In particular, information dominance of the rural AO, as the Afghan Mujahideen demonstrated, can provide intelligence that is highly advantageous. Moreover, as the Chechen and Iraqi insurgents have shown, some non-state armed groups have demonstrated flexibility and adapted traditional concepts of war to the urban AO. Armed groups are able to extend the battlefield regionally, as demonstrated by the Chechen terrorist strikes inside Moscow. In addition, some armed groups are able to project power globally, and groups like al-Qa'ida have turned Iraq into the central front of their global jihad.¹³

4. Types and Targets of Operations and Constraints, and 5. Limitations on Warfare

The fourth and fifth aspects to consider in building a new analytical framework focus on the types of operations carried out by non-state armed groups and the constraints and limitations on warfare. These include issues such as to what extent have traditional irregular operations broadened to use new tools such as suicide attacks? To what extent do targets include protected individuals and protected facilities? Do the international laws of armed conflict govern the use of force? How have the customary codes on the proportional use of force and status of

noncombatants been modified? Are prohibitions against targeting protected individuals and facilities eroding?

In many theaters of unconventional combat, the limits on operations, targeting, and constraints on violence are eroding.¹⁴ Armed groups still use guerrilla war tactics. Afghan Mujahideen employed them effectively against the Soviets, as have Iraqi insurgents against the United States. However, armed groups are no longer confining their operations to guerrilla tactics. The unconventional repertoire now includes improvised explosive devices (IEDs)—car bombs, suicide attacks, and roadside explosives; kidnapping and beheading noncombatants; and the desire to acquire WMD. Iraq and Chechnya are illustrative. Moreover, targets, as Iraq also illustrates, include everyone from contractors to aid workers and journalists, and everywhere from hospitals to schools and mosques.

6. Role of Outside Actors

The final aspect to consider is the role of outside actors—state and other non-state actors—in encouraging and enabling non-state armed groups to fight. Do outside actors provide support and assistance? What kind of help do they provide, and why? Are they transforming conflict from a local security problem to one with global linkages? How are outside actors fanning the flames of conflict with money, radical ideology, and extremist fighters?

The events of 9/11 and the insurgency in Iraq both demonstrate how much the role of outside support for armed groups has diversified since the end of the Cold War. This is especially true of the role of al-Qa‘ida and the Salafi Jihad movement in local internal conflicts. In particular, outside groups have a key role in providing financial support and jihadi warriors to local fights, which transforms local conflicts into part of the global jihad. Outside actors are often unrestrained in whom they target—the beheadings of foreign workers in Iraq by global jihadi fighters, until recently led by Abu Musab al-Zarqawi, are a case in point—and this can add to the destabilizing character of conflicts involving non-state armed groups.

Conclusions

If U.S. soldiers are to overcome irregular warriors in the “long war,” military commanders require a clear-eyed understanding of their adversary’s way of war. Not to be conscious of and adapt to it can be very costly in blood and treasure: indeed, “Mogadishu, Grozny, the Hindu Kush mountains and Afghan plains, and the Sunni triangle of Iraq are all deadly reminders of past ugly surprises” in which conventional militaries underestimated their unconventional foes.¹⁵

As the 2006 QDR acknowledges, current and future US military missions against irregular forces will feature counterterrorism, counterinsurgency, and stability operations. In each, the main adversary will be an armed group—and often more than one, as the post-Operation Iraqi Freedom experience in Iraq illustrates. To combat these armed groups—the insurgents, terrorists, and militias—it is necessary to develop a robust new framework for understanding and profiling the war-fighting modus operandi of armed groups. This paper presents such a framework using historical, anthropological, and cultural studies to discuss overall trends. This six-part framework can be applied on a case-by-case basis to a range of non-state armed groups to build the flexible and adaptive profiles necessary to combat future insurgents, terrorists, and militias.

Notes

1. Andrea J. Dew is the former Research Associate for the ISS Program at the Fletcher School, Tufts University, Medford, Mass., and is currently a Research Fellow at the Belfer Center for Science and International Affairs, Kennedy School of Government, Harvard University.

2. Project Ploughshares, *Armed Conflicts Report* (Waterloo, Canada: Institute of Peace and Conflict Studies, 2006).
3. The framework for this paper is drawn from Richard H. Shultz, Jr., and Andrea J. Dew, *Insurgents, Terrorists, and Militias: The Warriors of Contemporary Combat* (Columbia University Press: New York, 2006).
4. See, for example, assessments of post–Cold War conflicts by Project Ploughshares, *Armed Conflicts Report* (Waterloo, Canada: Institute of Peace and Conflict Studies, 2006).
5. See Richard H. Shultz, Jr., and Andrea J. Dew, “Counterinsurgency, by the Book,” *New York Times*, August 7, 2006; and Richard H. Shultz Jr., and Andrea J. Dew, *Insurgents, Terrorists, and Militias: The Warriors of Contemporary Combat* (Columbia University Press: New York, 2006).
6. On weak and failing states, see, for example, Robert Rotberg, ed., *Why States Fail: Causes and Consequences* (Princeton: Princeton University Press, 2004); Chester Crocker, “Engaging Failing States,” *Foreign Affairs*, September/October 2003; I. William Zartman, *Collapsed States* (Boulder, CO: Lynne Rienner, 1997); Martin Van Creveld, *The Rise and Decline of the State* (Cambridge: Cambridge University Press, 2003); Robert Dorff, “Democratization and Failed States: The Challenge of Ungovernability,” *Parameters*, Spring 1996.
7. For an in-depth discussion of arguments on root causes of internal conflict, see, for example, Donald Horowitz, *Ethnic Groups in Conflict* (Berkeley: University of California Press, 1985), Ted Robert Gurr, *Minorities at Risk* (Washington, D.C.: United States Institute of Peace, 1993), K. J. Holsti, *The State, War, and the State of War* (Cambridge: Cambridge University Press, 1996); Donald M. Snow, *Distant Thunder: Patterns of Conflict in the Developing World*, 2nd edition (New York: M. E. Sharpe, 1997); Snow, *Uncivil Wars: International Security and the New Internal Conflicts* (Boulder, CO: Lynne-Rienner, 1996); William E. Odom, *On Internal War: American and Soviet Approaches to Third World Clients and Insurgents* (Durham, NC: Duke University Press, 2003); *Small Wars and Insurgencies Journal* (Special Issue: Non-State Threats and Future Wars) 13, no. 2 (Autumn 2002); Monty Marshall and Ted Robert Gurr, *Peace and Conflict 2003* (College Park, MD: Center for International Development and Conflict Management, 2003); and Mary Kaldor, *New and Old Wars: Organized Violence in a Global Era* (Stanford, CA: Stanford University Press, 1999).
8. The National Intelligence Council’s *Global Trends 2015*, published in 2004, concludes that internal and transnational conflict will present a recurring cause of global instability and that these conflicts will become increasingly lethal. Weak and failing states will generate these conflicts, threatening the stability of a globalizing international system. See www.cia.gov/nic/pubs/2015_files/2015.htm.
9. Department of Defense, “Quadrennial Defense Review Report 2006,” February 6, 2006, p. 10.
10. On Sun Tzu, see Samuel B. Griffith, ed., *Sun Tzu: The Art of War* (London: Oxford University Press, 1963).
11. Summarized from Richard H. Shultz, Jr., Douglas Farah, Itamara V. Lochard, *Armed Groups: A Tier-One Security Priority* (Colorado Springs: U.S. Air Force Academy, Institute for National Security Studies, INSS Occasional Paper 57, 2004). For one of a number of recent studies criticizing U.S. failure to distinguish between the specific armed-group threats in Iraq, see www.washingtonpost.com/wp-srv/nations/documents/rand_04_01.pdf (accessed on April 1, 2005). See also Bradley Graham and Thomas E. Ricks, “Pentagon Blamed for Lack of Postwar Planning in Iraq,” *Washington Post*, April 1, 2005, A3.
12. This framework is drawn from Shultz and Dew, *Insurgents, Terrorists, and Militias*, p. 37.
13. The declassified key finding of the April 2006 National Intelligence Estimate notes that “the Iraq jihad is shaping a new generation of terrorist leaders and operatives; perceived jihadist success there would inspire more fighters to continue the struggle elsewhere.” Declassified Key Judgments of the National Intelligence Estimate. “Trends in Global Terrorism: Implications for the United States,” April 2006 (accessed October 31, 2006); available from www.dni.gov/press_releases/Declassified_NIE_Key_Judgments.pdf.
14. Traditional cultures have strict rules against such targeting, but in Somalia, Afghanistan, Chechnya, and Iraq these restrictions have seriously waned.
15. Shultz and Dew, *Insurgents, Terrorists, and Militias*, p. 270.

Panel IV: Terrorism, Proliferation, Transnational Crime, and Migration

Summary of Discussion

Professor Jeffrey H. Norwitz

**John Nicholas Brown Academic Chair of Counterterrorism and
Professor of National Security Decision Making
U.S. Naval War College**

The fourth panel, Terrorism, Proliferation, Transnational Crime, and Migration, sparked a spirited discussion of threat, risk, and vulnerability. Provocative, insightful, and stimulating, panel members Rohan Gunaratna, Mohan Malik, and Andrea Dew highlighted the entire spectrum of terrorist threats—from primitive (small arms and machetes) to catastrophic (nuclear) attacks, and the emerging importance of armed groups as the future of conflict changes. Considering the advance of global terrorism, weapons proliferation, and transnational crime, what should a maritime strategy embrace to address these threats? Can the world's navies confront these challenges?

Rohan Gunaratna noted that global terrorism has changed in the past five years. Iraq, not Afghanistan, is the epicenter for America's war on terrorism. Additionally, ideology is the primary driving factor. Movement of personnel, goods, and technologies is where global terrorists are focusing attention. Consequently, maritime capability and the world's oceans will undoubtedly be an avenue of transportation. Gunaratna's personal review of captured documents reveals al-Qa'ida has mature plans for maritime operations, including diver training. Nevertheless, Gunaratna maintained that maritime strategies are limited in their efficacy to counter the maritime terrorist threat. "I strongly believe," said Gunaratna, "that the Navy cannot play a role in fighting the maritime terrorist threat. Maritime counterterrorism is largely fought by law enforcement and the land forces." According to Gunaratna, terrorists recruit, plan, organize, equip, resource, and reorganize on land. He observed that terrorists' actual time at sea is short and is only a small part of the attack trajectory.

Mohan Malik argued that WMD proliferation, and, in particular, nuclear potential, will be a defining challenge in the maritime environment. Using the world's oceans, groups who espouse anarchy and unrest will take advantage of the unmanageable littoral regions. He spoke about traditional proliferation worries at the levels of the state and non-state actor. Particularly intriguing was his introduction of the concept of groups that seek to destroy traditional nation states. Malik labeled them "anti-state" actors. His concern is that proliferation of WMD in the hands of anti-state actors will make their ruinous goals more obtainable.

Andrea Dew captivated the audience with a groundbreaking analysis of how armed groups will become tier-one security threats. She offered that since 1985, more than 60 states have experienced conflict in which non-state armed groups have been involved. The United States faced non-state armed groups in Somalia in 1993, and the Soviet Union faced non-state armed groups in Afghanistan. Today, Russia faces a non-state armed group in Chechnya, and the United States faces non-state armed groups in Afghanistan. Moreover, an armed group, Hezbollah, demanded attention and strategic reactions from regional powers and the international community during the summer of 2006. And in Iraq, U.S. efforts to stabilize that country have been effectively thwarted by non-state armed groups. Dew introduced a six-part framework for approaching armed groups, which seem to dominate in failed, failing, and flailing

states. Armed groups have a root cause. They don't simply emerge from nowhere. Nevertheless, traditional concepts of war remain relevant, though they must be adapted to the twenty-first century. Dew's presentation provided a fascinating view into the heart of what may well be the future face of war.

Workshop participants were quick to pepper the panel with questions and counterpoints. One observation dealt with how fighting terrorism has been solely about "building military and police capacity" to engage terrorists kinetically. Rather than looking to solve cultural grievances, nations have been focused on creating force-on-force solutions that have failed, as exemplified by Israel. Ronald Reagan was paraphrased to the effect that our real strategy should be to turn potential enemies into friends. History is full of examples in which terrorist armed groups evolved into responsible movements that legally became part of the government: evidence Russian Bolsheviks, the Farabundo Marti National Liberation Front in El Salvador, and the African National Congress under the leadership of Nelson Mandela. The point was not simply to look at armed groups as objects against which to wage war, but to find ways to reduce their demand for violence.

Another participant opined that all too often, security practitioners engage in "fearmongering" by exaggerating the threat from armed groups and terrorists. Furthermore, without empirical data, it's hard to see how U.S. national interests are threatened simply by the potential for catastrophic attack. Along the same line, another participant observed that terrorists, who operate out-of-area, rarely translate their activity into strategic effectiveness. In response to these views, one panelist maintained that global groups have mature out-of-area infrastructure for propaganda, recruitment, fund-raising, procurement, safe houses, training, and communications. The panelist used the September 11 attacks to show how U.S. foreign policy, particularly as it relates to Iraq, has certainly suffered on a strategic level from such groups. These are substantiated facts and not fabricated fearmongering. Likewise, the panelist's own access to original documents and "insiders" contradicts charges of hyperbole.

As pertaining to globalization, one participant noted that although terror groups do feed on modern information technology, it's not accurate to refer to this as globalization's "dark side." Rather, it's the regions that are least globalized that trigger armed groups. The lack of globalization seems to have negative consequences. Expanding hope and individual potential through ever-increasing globalization is a way to defeat the root causes of terrorism. An added thought dealt with the concept of collective security as an antidote to proliferation by nation states—evidence the belief that "nukes" keep you safe from U.S. attack. Upon reflection, American foreign policy should focus on reducing the incentive for state proliferation.

Why do people fight? What's the catalyst for local anger to become global in scope? These questions framed another fascinating line of discussion. Global struggles begin with a local cause. Understanding the root cause of conflict explains why some armed clashes become global and some remain regional. Strategies to address global conflict have to consider why the belligerents fight in the first place.

In sum, the three panelists and the strategic conversation that followed their prepared remarks framed the security environment in novel ways that will aid scholars and practitioners who wrestle with a new maritime strategy.

Panel V

International Cooperation in Securing the Maritime Commons



Professor Craig H. Allen

Charles H. Stockton Professor of International Law, U.S. Naval War College

Vice Admiral Lutz Feldt

German Navy (Retired)

Moderator:

Dr. Thomas R. Fedyszyn

Security, Strategy, and Forces Course Director, National Security Decision Making Department, U.S. Naval War College

Legal Interoperability Issues in International Cooperation Measures to Secure the Maritime Commons

Professor Craig H. Allen
Charles H. Stockton Professor of International Law
U.S. Naval War College¹

The life of the law has not been logic, but experience.

—Oliver Wendell Holmes, Jr., *The Common Law*

Introduction

I would first like to say that I much prefer the phrase “securing the commons” to the more provocative and inaccurate “command of the commons.” The latter is impossible to objectively assess and, more important to me, a legal oxymoron. The commons are just that: a shared space not subject to any nation’s sovereignty or control, and, for that reason, a space where all states have an obligation to promote and enforce the public order necessary to prevent a tragedy in those commons, whether by overuse, abuse, or malevolent misuse. The U.S. approach reflected in the National Strategy for Maritime Security (2005) eschews any pretension to “command” of the maritime commons, calling instead for enhanced maritime domain awareness and an active, layered defense, together with measures to reduce vulnerability and improve consequence management readiness.

In a workshop of distinguished economists, I confess my lack of competency on all matters involving the dismal science and will instead focus my remarks on some of the salient legal issues raised by the title of this panel—more specifically, on legal interoperability issues. On this question I am happy to report that over the past five years or so the law has adapted to our often tragic “experience” (to quote Justice Holmes) in a number of proactive ways, in an effort to anticipate conflicts and eliminate them where possible. However, more work lies ahead.

Combined operations—particularly coalition operations—are one area where more remains to be done. The U.S. Army’s *Operational Law Handbook* sets the scene. It explains that

The United States often chooses to participate in operations alongside other nations. While some of these operations are conducted within an established alliance such as NATO, others are coalition action. Coalition action is multinational action outside the bounds of established alliances, usually for single occasions or longer cooperation in a narrow sector of common interest. Recent examples are Operation Enduring Freedom and Operation Iraqi Freedom. Unlike NATO operations, coalition action by its nature does not have a predetermined structure or decision-making process.

[One] disadvantage of coalition action is that it often raises significant interoperability issues that need to be resolved to ensure success of the operation.

1. Charles H. Stockton Chair in International Law, U.S. Naval War College. I am indebted to Colonel Michael Hoadley, JAGC, USA, a professor at the U.S. Army War College, for his insights into legal interoperability issues and for alerting me to the U.S. Army *Operational Law Handbook* coverage of the subject; and to Commander Sean Henseler, JAGC, USN, of the U.S. Naval War College faculty, for sharing his recent first-hand experience on the subject.

Interoperability issues arise for a number of reasons. First, the coalition partner may have different legal obligations, such as being signatory to a treaty to which the United States is not a party and which the United States does not consider customary international law. Second, the United States and the coalition partner may both be legally bound by a provision of international law, by treaty or custom, but may interpret their obligations differently. Finally some differences may not result from law at all, but from the application of domestic policy.²

Planning for multinational operations in the maritime commons may take one of several forms. In established alliances, such as NATO, planners can address interoperability issues through prior agreements, such as the Allied Publication series and the NATO standardization agreements (STANAGs). In what is sometimes referred to as proactive, “Phase Zero” planning, the geographic combatant commanders prepare theater security cooperation plans for their areas of responsibility. Those plans typically call for military-military exchanges and other relationship-building measures with other forces in the theater, to improve military capabilities and interoperability. Finally, there is the ad hoc planning approach, hopefully drawing on planning models and templates.

Actual maritime security operations within the various theaters may be carried out unilaterally, by established alliances, such as NATO, or by coalition actions, such as the Commander Task Force 150 operations in the far western Indian Ocean and Red Sea approaches off the Horn of Africa. Other recent, and nongeographically specific, partnering initiatives include the Proliferation Security Initiative and the 1,000-ship navy concept—now called the Global Maritime Partnership.³

At-sea maritime operations take a variety of names, including maritime security operations (mentioned above),⁴ or more specific labels, such as maritime interception operations,⁵ maritime interdiction operations,⁶ or maritime law enforcement operations.⁷ In some cases the legal basis for the maritime operation comes from a UN Security Council resolution or a right of individual or collective self-defense, but in many of the boardings the legal basis for the “end game” ultimately lies in the extraterritorial application of some nation’s domestic law. Regardless of the form of the cooperative arrangement, the participating states often come to the table with divergent rule sets (legal authorities and restrictions).⁸ Despite the pressure of globalization to

-
2. U.S. Army Judge Advocate General’s Legal Center and School, *Operational Law Handbook* (Charlottesville, Va.: U.S. Army Judge Advocate General’s Legal Center and School, 2006), at pp. 527–30.
 3. The U.S. Navy CNO has called the 1,000-ship navy “a network of international navies, coast guards, maritime forces, port operators, commercial shippers and local law enforcement, all working together.”
 4. Maritime security operation missions include ensuring freedom of navigation, the flow of commerce, and the protection of ocean resources, and securing the maritime domain from nation-state threats, terrorism, drug trafficking, and other forms of transnational crime, piracy, environmental destruction and illegal seaborne immigration. Chief of Naval Operations and Commandant of the Marine Corps, *Naval Operations Concept* (2006).
 5. U.S. Navy, *Maritime Interception Operations*, NTTP 3-07.11/CGP 3-07.11 (2003) (defining “interception” as the “legitimate action of denying suspect vessels access to specific ports for import or export of prohibited goods to or from a specified nation or nations, for purposes of peacekeeping or to enforce imposed sanctions.”). “Expanded” MIO refers to interception operations in the absence of a collective security measure.
 6. See Chairman, Joint Chiefs of Staff, *Doctrine for Joint Interdiction Operations*, Jt. Pub. 3-03 (1997), which defines interdiction as “an action to divert, disrupt, delay or destroy the enemy’s surface military potential before it can be used effectively against friendly forces.” Within the U.S. *National Strategy for Maritime Security* framework, interdiction is described as “actions taken to divert, delay, intercept, board, detain, or destroy, as appropriate, suspect vessels, people, and cargo.” “Interdiction” is the favored term in most NATO countries. It is also used in the Proliferation Security Initiative “Statement of Interdiction Principles.” On the other hand, it is disfavored by some states, particularly China.
 7. Maritime law enforcement operations refer to activities by officials with the legal authority to detect crimes, apprehend violators, and gather the evidence necessary to support prosecution.
 8. For the lawyer, legal interoperability questions are typically analyzed under the “conflict of laws” framework. Proactive lawyers seek to avoid conflicts by, for example, working to unify and/or harmonize the laws, or at least being clear about which law will apply to a given transaction, through insertion of a choice of law clause.

harmonize the law and make it more uniform, differences continue to exist, whether on matters of trade, immigration, maritime crime, security cooperation, disclosure of intelligence, or the interpretation or application of law of the sea or law of armed conflict issues. As a result, the participating states must confront several recurring legal interoperability issues. For this synopsis, several issues are highlighted for possible discussion:

- Rules of Engagement
- Rules regarding the right to exercise self-defense
- Targeting issues (i.e., what is a “military objective”; proportionality issues)
- Use of certain means and methods (landmines, chemical riot control agents)
- Status and treatment of detainees
- Status of armed forces (SOFAs, VFAs, Article 98 agreements)
- Access to information and intelligence.

Theater security cooperation plans can help avoid or mitigate some of the common legal interoperability problems, but they have never received the funding needed to reach their full potential. In some cases, the divergent rule sets can in fact be harmonized into “combined forces” rules, as in the case of Combined Rules of Engagement (CROE). Another commonly used approach to work through or around such issues calls for the participating states to collectively prepare a “legal matrix” that displays the key elements of their respective rule sets and reveals any variations. The difference in the two approaches is an important one: in the first, the relevant rules are in fact harmonized (often, however, by reducing the rules to the least common denominator); in the latter, national differences are maintained, but once collected into the matrix by the operational commander they are at least *available* for communication to the participating units, though classification issues and other objections might impede the full realization of that goal.

The U.S. Naval War College, with the support of its International Law Department and the affiliated Naval Reserve components, has taken the initiative to address a number of these recurring issues, by, for example, sponsoring flag- and general-officer-level courses for Combined Forces Maritime Component Commanders, where interoperability issues can be analyzed and minimized as much as possible; and by its work on drafting model CROE and on collecting and clarifying the discordant laws governing maritime exclusionary zones. One subject where additional efforts to promote legal interoperability are needed is in intelligence matters.⁹

Legal Interoperability on Intelligence Matters

It has become commonplace to criticize the intelligence community for its secretive, stove-piped approach, which, as famously described by the U.S. 9/11 Commission, impedes their ability to “connect the dots.” While such criticism might be politically popular, it reveals a shameful disregard for the underlying legal and policy issues, to say nothing of the practical limitations that militate against wider disclosure of some classified information. Nevertheless, a number of recent studies, presidential directives, statutes, and international agreements have called for greater intelligence-sharing. Not surprisingly, the 9/11 Commission was among the first. Congress soon followed, demanding greater intelligence-sharing in the 2004 Intelligence

9. The author is indebted to Captain Santiago R. Neville, USN, the RADM Edwin Layton Chair in Intelligence at the Naval War College, and to Captain Maureen Neville, USN, Officer-in-Charge of the Office of Naval Intelligence Detachment at NWC, for their helpful suggestions on intelligence interoperability issues.

Reform and Terrorism Prevention Act. The new catchphrase admonishes that the old “need-to-know” restriction must give way to a “need-to-share” approach, an approach that’s increasingly facilitated by the policy directing members of the intelligence community to “write for release.”¹⁰ In 2003, the states participating in the Proliferation Security Initiative agreed to a Statement of Interdiction Principles that provides a framework for intelligence-sharing in counterproliferation operations. In 2004, the G-8 states entered into an agreement that called upon the member states to pass legislation if necessary to ensure that terrorism information can be shared internally with police and prosecutors and externally with other countries. The G-8 agreement also recommended that each state ensure it can legally use a variety of “special investigative techniques,” such as wiretaps, audio and visual surveillance, and interception of electronic communications.

The call for greater intelligence-sharing in some areas of common concern and concerted action carried over into the National Strategy for Maritime Security and its eight supporting plans. One of those supporting plans lays out the means to achieve greater Maritime Domain Awareness (MDA); another provides the framework for Global Maritime Intelligence Integration. But any discussion of sharing must give careful consideration to the applicable legal limits on doing so. It is almost certainly the case that some components of the MDA system, or information in the MDA system, will not be disclosable to foreign nations under existing law. Doing so may reveal sources and methods in a way that may cost the lives of the former and the long-term effectiveness of the latter. Within the United States, we must also grapple with the legal restrictions on providing proprietary information and information obtained through intelligence channels to law enforcement agencies—a question only partly addressed by the Foreign Intelligence Surveillance Act, USA PATRIOT Act, and Maritime Operational Threat Response plan. This is not the forum to explore these technical and partly classified interoperability issues. Let me just say that more work might be needed, either to clarify the restrictions or to at least avoid unreasonable expectations on the part of coalition partners.

Let me close with a short list of some of the recurring intelligence- and law-related interoperability issues that coalition commanders and operators and their intelligence officers and lawyers should be prepared to address and respond to (I would be happy to discuss any of these with the distinguished panelists):

- A request to disclose the factual basis for invoking the right of self-defense (i.e., proof of an imminent threat) to the UN Security Council, a regional security body, or a coalition partner.
- A request by a partner state to disclose the basis for concluding that a potential target constitutes a “military objective,” or that striking that target would not violate the prohibition on “disproportionate” use of force.
- A request by a partner state (or flag state) to disclose the basis for a boarding, search, seizure, or arrest, where the governing legal standard is “reasonable basis to believe,” “probable cause to believe,” or something similar.
- A request from a partner state (or an international criminal tribunal) to disclose intelligence for use in a criminal prosecution. In U.S. prosecutions, this issue is addressed in the less-than-pellucid or -predictable Classified Information Procedures Act.

10. See, e.g., Director of Central Intelligence, Directive 8/1 (June 4, 2004) (defining “write to release” as: “A general approach whereby intelligence reports are written in such a way that sources and methods are disguised so that the report can be distributed to customers or intelligence partners at lower security levels. In essence, write-to-release is proactive sanitization that makes intelligence more readily available to a more diverse set of customers. The term encompasses a number of specific implementation approaches, including sanitized leads and Tearline reporting.”).

Conclusion

In a workshop of legal experts from around the world, held in this same room last week, 94 percent of the experts stated that they believe future U.S. Navy operations will be “more combined.” Assuming they are right, the effectiveness of future international cooperation in securing the maritime commons will require us to continue to work toward resolving legal interoperability questions. Experience has shown that information-sharing not only serves to improve security-related decision making, it can also be an effective trust-building measure. Although there are plainly good reasons to facilitate timely and effective information-sharing in many cases, it is important not to lose sight of the fact that increased disclosure might come at the expense of the long-term effectiveness of the intelligence community. The solution to legal interoperability issues is not to eliminate every national restriction, but rather to carefully review the disclosure laws and policies, to ensure any unnecessary restrictions on disclosure are removed, to follow the write-for-release policy when drafting intelligence products as much as possible, and then to ensure that our maritime security partners understand the remaining restrictions on disclosure and the reasons for them.

Addendum



INTERNATIONAL COOPERATION IN SECURING THE MARITIME COMMONS

Craig H. Allen
Charles H. Stockton Professor of International Law

SIMPLIFYING TASKS

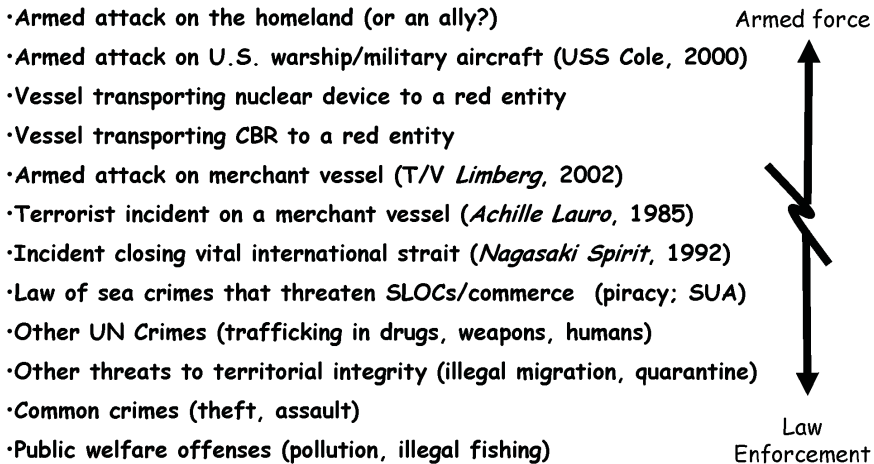
- Inventory the range of maritime threat scenarios
- Ensure prescriptive regime for all of the threat scenarios is adequate
- Enforcement: allocate responsibility for all of the threats:
 - Threats to domestic order
 - National security threats
 - Transnational threats
 - Regional threats
 - Global threats

Which are of
MARSTRAT concern?
Which are not?

SIMPLIFYING TASKS

- Draft objective criteria for taking action on each threat (too difficult?)
- Determine who should be responsible (risk manager) for all such threats, based on magnitude and location:
 - Peace and good order threats
 - Ordinary magnitude threats (LEDET/MSST level)
 - Extraordinary magnitude (need for SOFs or CBRN)
 - Remote location & transnational threats
 - True national defense threats

RANGE OF SECURITY THREATS, EVENTS & RESPONSES



COMPARATIVE ADVANTAGE

- What's primary?
 - What *must* you do?
 - What essential service do you provide that no one else can do?
- What's secondary?
 - What *should* you do?
 - What do you do better than anyone else?
- All else? Not our in-box

MARITIME SECURITY MISSIONS

- "Traditional" missions:
 - Forward presence
 - Crisis response
 - Deterrence
 - Sea control
 - Power projection
- According to the NOC, these remain the "cornerstone of our force capability"
- "Non-traditional" missions:
 - Civil-military ops
 - Counter-insurgency
 - Counter-proliferation
 - Counter-terrorism
 - Maritime security operations
 - Information operations
 - Air/missile defense
 - Security cooperation

Source: *Naval Operations Concepts 2006* (NOC)

MARITIME SECURITY OPERATIONS

- The 2006 *Naval Operations Concept* lists the following activities under its section on "Maritime Security Operations":
 - "ensure freedom of navigation, the flow of commerce and the protection of ocean resources"
 - "secure the maritime domain from nation-state threats, terrorism, drug trafficking and other forms of transnational crime, piracy, environmental destruction and illegal seaborne immigration."

How many of these require an exercise of
law enforcement authority?

STRATEGIC SORT

<div>Responder</div> <div>Magnitude</div>	UN Security Council Ch. VI & VII	Regional Arrangements (Chapter VIII)	States: Coalitions Unilateral	Private Entities (Self-Help)
Threat to Int'l Peace and Security				
Threat to Regional Peace and Security				
Threat to One Nation's Security				
Threat to Domestic Order				

STRATEGIC SORT

- Presumption 1: security—on land, in territorial seas and in global commons—is a national *law enforcement* issue
 - Assess strictly the adequacy of the rule set (prescriptions)
 - Assess adequacy of enforcement measures
 - National Strategy for Maritime Security (+8 supporting plans)
 - Roles of flag states, coastal states, port states
 - What happens when the "able and willing" states step in?
- Presumption 2: if it exceeds the jurisdiction or capabilities of a single nation's law enforcement entities it's a transnational law enforcement issue
 - Bilats/MLATs, cooperation/coordination among L/E agencies
 - Are the commons (high seas) really a "special case"?

Has ADM Mullen’s new Maritime Strategy kicked in yet?

STRATEGIC SORT

- Presumption 3: if the threat exceeds the multinational L/E entities' capability or capacity, it's a multinational/regional security issue (it might also be a threat to international peace and security)
 - UN Charter, Chapter VI, VI $\frac{1}{2}$, or VII)
 - Regional defense and security arrangements
- Presumption 4: if it exceeds the regional organization's capability or capacity, it's a threat to international peace and security
 - UN Charter, Chapter VII
- Last Possibility: ***When regional and collective security fail***:
 - What action do you take WRT the threat? Unilateral/preemption, etc
 - What action do you take WRT the rule set?

When does ADM Mullen's new Maritime Strategy kick in?

RESPECTIVE STATE ROLES

- Jurisdiction over vessels and persons aboard the vessel varies by:
 - Flag of the vessel (*ratione personae*)
 - The vessel's location (*ratione loci*)
 - Vessel activity (*ratione materiae*)
- States that might have jurisdiction
 - The flag State
 - The coastal State
 - The port State
 - An "enforcing" state (the "willing and able")

UNCLOS ARTICLE 110: RIGHT OF APPROACH

- A warship may approach (and board) a foreign vessel on the high seas if the warship has reasonable ground to believe the vessel is:
 - Engaged in piracy
 - Engaged in the slave trade
 - Stateless or of the same flag as the warship
 - Engaged in unauthorized broadcasting (huh?)
- The next move? A right of visit for any crime with the "generally accepted international standards"? (e.g., the 13 UN terrorism treaties)

U.N. SECURITY COUNCIL: INT'L PEACE AND SECURITY

- What did the legal experts say about the UNSC?
 - 72% said the UNSC is the most influential int'l organization in the global legal order
 - Only 50% thought it would expand beyond the P-5; if it did, the US Senate would never ratify the amendment
 - 83% believed that even if the UNSC made an Art. 39 finding, there was only a 50-50 chance that it would impose any sanctions

International Cooperation in Securing the Maritime Commons

A Food for Thought Paper Based on Practical Experience in International Cooperation

Vice Admiral Lutz Feldt
German Navy (Retired)

Introduction

It is of utmost importance to define the political aim that should be achieved by the anticipated international cooperation. The already elaborated twin goals economic prosperity and security are providing excellent guidance on the so-important operational level. But what we need, too, is an overarching object for our efforts. That is due to the recognition that we are dealing with a process-orientated matter.

Globalization is an economic phenomenon—but with numerous various aspects. Taking these aspects seriously, we need a broader approach, as given by the above-mentioned twin goals. So my suggestion is to use “Freedom of the Seas” as the political aim. Maritime power—for example, the 1000-ship navy—is the operational level. In accordance with Alfred Thayer Mahan, the three pillars of maritime power are naval power, a powerful merchant navy, including the ability and capability for sea exploitation and environmental protection, and, as the third pillar, the control of strategic points, today called “choke points” or “hot spots.” Mahan came to the conclusion that these are the preconditions of the maritime power of one single nation. I think they are valid in international operation as well.

Factors Creating the Framework for Cooperation

First of all, we are dealing simultaneously with national states and independent international institutions and networks.

Secondly, the exploitation of the whole richness of the sea is already an important process on the maritime agenda. It includes trade and industrial and scientific activities. It will increase in importance.

Thirdly, the environmental point of view is already a valuable cause for international cooperation. It will increase its influence on all kinds of international activities, mostly in the field of economic development. I think we should give this factor a lot of attention.

Last but not least, it is very valuable to take the cultural and/or intellectual dimension into account. There are various approaches possible. I want to put my focus upon two of them: firstly, the fact that the free movement of people and ideas is playing an active part in the development of the hearts and minds of people; and secondly, that different mentalities are playing a major role in all kinds of international cooperation. This difference has to be accepted and to be taken as a given. As an example, I want to underline the different ways of executing leadership on board our ships and in our staffs.

As a summary it is very obvious that three out of the four factors are directly or indirectly related to economic prosperity as the major driving force of our global world.

The fourth one is what I call the “software” of any kind of international cooperation. It is creating a possible link between various mentalities—ways of thinking and solving tasks.

So it is not all about money; it is about people as well.

Practical Experience

Thinking about where we, the military, come from, we know that international cooperation has been happening in some parts of the world for decades. And this cooperation is still ongoing as we are discussing our way ahead.

NATO was established in 1949 as the North Atlantic Treaty Organisation, as an organisation focused on the Atlantic Ocean. Since the end of the Cold War, it has been executing land operations. With the diminishing of SACLANT, the navy’s guardian in Norfolk, Virginia, there is only limited promotion for the maritime origin of the alliance. But it is still the only and most developed organisation for international cooperation in the maritime commons. NATO units of all sizes had been a “fleet in being” during the Cold War and are now “fleets in operation,” opposing the threat caused by terrorists. Almost 60 years of cooperation have developed a high standard of common understanding, common procedures, and a high degree of standardisation. It is a true story of success.

But at the same time areas of concern have become apparent, too: the technical gap, the diminishing influence of the smaller nations (navies), the still-existing different leadership policies and the perception of a lot of nations, inside and outside of NATO, that the alliance is a purely U.S.-led organisation. This makes some initiatives for more and deeper international cooperation more difficult than they should be.

The experience of NATO can and should be used as a tool for shaping international cooperation.

Another example is the Partnership for Peace program. Established in the early 1990s, colocated but separate from NATO Headquarters, it offered a very comprehensive training schedule. This schedule has been shaped to the different demands of the participating nations (navies) and worked for cooperation as well as for integration. It has worked well in the region of northern Europe. It cannot be used as a blueprint for other regions, but it is offering a lot of very successful advice for our way ahead.

The Mediterranean Dialogue is another way to establish links for a closer cooperation. The situation is different from that in northern Europe, and it needs more patience and preparation to reach the goal. Some of the basic work has been done by NATO’s Southern Command in Naples. This has been further taken by the regional seapower symposium hosted by the Italian navy every second year. The focus was on regional cooperation to produce a white shipping plot. Another topic was the coordination and cooperation inside the territorial waters of the different North African nations in order to achieve a better picture of the situation.

Even a real-world operation such as “Enduring Freedom” is a proof of the willingness and ability for cooperation in a certain region in order to achieve a common goal.

My experience in maritime-related matters from the EU’s perspective is very limited. But this is due to the fact that the EU has not been focused on maritime matters, and still is not in securing the maritime commons. The “Green Paper” published in June 2006 about “The Future Maritime Policy: Taking Stock of the Process” is a very encouraging approach and offers the opportunity to include naval options to the concept. A quotation from a speech given by a member of

the European Commission responsible for fishery and maritime affairs, Mr. Joe Borg, presents an inside look into the commission's activities:

A new holistic maritime policy is needed, because globalization is fast increasing its pace and magnitude, generating more trade and economic interactions between the different regions of the world. In these circumstances, Europe will depend even more on its seaports and its merchant fleet, its shipyards, the marine equipment, and its logistics. This is why the commission in its strategic objectives for the current mandate has recognised the need, within the context of the Lisbon Strategy for growth and jobs, of a thriving maritime economy.

Meetings like the Combined Forces Maritime Component Commanders Course for flag-level officers, which took place here at the Naval War College in September this year, are unique facilitators for increasing cooperation. Continuing with this region-oriented approach and keeping in mind the different national interests is the first step in creating the global awareness that is needed for the realisation of the twin goals. In addition to what I have laid down above, there are a lot of international security agreements, bilateral as well as multilateral, that can be used to promote the vision of the 1000-ship navy and bring it to reality.

When I look at my catalogue of questions guiding me through my practical experience, I want to add some information of a different kind than the above-mentioned.

It is always a very crucial and sensitive task to manage the decision of who will be in the lead of any kind of international operation, seminar, or training. In our anticipated cooperation, it is not always appropriate to link the overall responsibility together with the effort made by the individual participating nation. A well-balanced method is required and must be decided at one of the flag-level courses.

Funding is a crucial issue in all kinds of international cooperation. The participation or nonparticipation of a nation is not alone a question of willingness or of political approval but often a question of resources available. But common training is a prerequisite for achieving the goal and developing a mutual understanding in operating together.

For the time being, the U.S. command structure is sufficient for the organisation and the necessary administration. In addition to this, the already-existing seapower symposia will be used as important places for discussions and decisions. And there is an urgent need to establish seapower symposia in all regions of the world. The International Seapower Symposium taking place here at the Naval War College should be seen as the forum to deal with all matters that are related to the step-by-step realisation of the 1000-ship navy.

Conclusion

A strong motivation to participate in this international effort is needed. A precondition for participation is a common assessment, based upon trust and confidence, about the threat on one hand and information management on the other hand.

Including representatives from international and national organisations dealing with the sea, with emphasis on coastguard-like organisations, the merchant navy, and international maritime law, will serve the idea of a broader approach.

And last but not least: tasking a professional company to develop a media campaign to work for the different regional seapower symposia will enhance acceptance and understanding inside and outside the military.

Economics and maritime strategy are very much related to each other. In the discussion about what is the important factor of our globalization process, economics are, in the perception of the peoples, the only factor.

In international cooperation at sea, answering the question how we can achieve our goal is a lot about trust and confidence. And it is about the willingness and ability of the big actors in the actual maritime commons to create a situation where, on one hand, a strong leadership is provided, but on the other hand the smaller actors have a fair chance to bring their ideas and abilities, including responsibility and leadership, into the process of establishing the 1000-ship navy.

Panel V: International Cooperation in Securing the Maritime Commons

Summary of Discussion

Dr. Thomas R. Fedyszyn

**Security, Strategy, and Forces Course Director
National Security Decision Making Department
U.S. Naval War College**

The maritime commons is defined as that oceanic part of the globe beyond the territorial seas of nation states, including the airspace above. Other “global commons” include Antarctica and space. Because they are “common,” it is a misnomer to suggest that they can be “commanded” in any meaningful sense—they can only be kept secure. This notion dates back to Grotius, who recognized that states needed access to the sea for survival and that rule sets needed to be fashioned and observed in everyone’s best interest. While the environment cannot be commanded, vessels using these commons can be regulated by the state “flagging” the vessel. Much of today’s “nontraditional” threats stem from the inability or unwillingness of flagging states to execute these responsibilities. This requires international intervention.

The discussion of international maritime cooperation must be driven by the rule sets of the required maritime security missions. The range of possible options runs from law enforcement activities, such as stopping illegal fishing, up to the military mission of defending the homeland against an assault from the sea. Many missions of maritime security traditionally fall to a coastal force (coast guard), and others to a national navy. The determination of the dividing line between these two tasks is one of the most difficult tasks facing nations. Nations should employ the concept of “comparative advantage” when making this determination, while recognizing that there will be situations in which the legally empowered force (coast guard) will not have the wherewithal, and vice versa. Incidents such as the armed attack of a merchant vessel or the closing of an important strait are representative of those needing close attention, since it is not entirely obvious into whose purview they fall.

Although most threats in both areas emanate from the land, the requirement for maritime security forces is not trivial. Upwards of 600,000 vessels ply the world’s waterways, and they are tremendous targets for terrorists and pirates.

A first principle must always be that international law remains supreme—the Spanish Marines who took down the North Korean vessel with missiles being shipped to Yemen were ultimately not as powerful as international law. Yemen received the missiles.

Another dilemma facing maritime planners is that different nations establish different mandates and rules of engagement for their forces. Little can be done to make these interpretations uniform; however, the United Nations continues to receive high levels of legitimacy from all national bodies, empowering all its subsidiary bodies to continue to press for universal standards. A recent conference of legal experts concluded that the need for regional and multilateral law enforcement efforts at sea would grow significantly. The world’s navies have developed “work-arounds” that take some of the burden off structured international law; however, what is clear is that today’s international regime cannot stand down from its current approach before there is a more viable alternative.

Actual international maritime cooperation has been moving in a positive and realistic direction for some time. The best modalities of international maritime cooperation are the extant frameworks and institutions. Using them to build even sturdier frameworks should be encouraged in a step-by-step approach. The pinnacle consultative body along these lines should be the U.S. Naval War College's biennial International Seapower Symposium (ISS), in which the leaders of virtually all the world's navies (and many coast guards) assemble to discuss international maritime cooperation. In addition, there has been a proliferation of regional seapower symposia (RSS) (for example, those led by Italy in the Mediterranean and Singapore in Southeast Asia) applying these practices in a regional format. The U.S. command structure of regional combatant commands has the capacity to assist all regional seapower symposia while not presuming to take the lead. While this movement should keep an eye to the region, there would be no substitute for the nation state as the fundamental building block. National sovereignty must remain the guiding principle.

Since active membership in these regional arrangements would be situational (rather than permanent and enduring), the ability to integrate smoothly and seamlessly into the regional structure is crucial. The likelihood of "coalitions of the willing" is greater as the maritime threats become more nontraditional rather than existential. Nations will ebb and flow into the regional maritime arrangements. This is to be encouraged and expected.

There is also a need to establish baselines and benchmarks in maritime security training at the regional level. The Theater Security Cooperation plans of the United States could set training standards. Then we ought to measure national training levels so that we neither overtrain nor undertrain participating navies and coast guards. Additionally, we should take into account nongovernmental organizations (NGOs) and bring them actively into the training regime. Efficiency should be a watchword, because many navies are driven by resource limitations. We must maximize the use of the Internet to disseminate the rich ideas produced by the ISSes and RSSes and ensure that we eliminate all obstacles to participation.

The U.S. Navy's new Naval Operational Concept was designed to open as wide as possible the range of missions of maritime security. It was written by all three American sea services—the Navy, Marine Corps, and Coast Guard—with an eye toward maximizing cooperation activities with allies and searching for ways to foreclose the options of maritime adversaries. Coast guards must necessarily be treated as equal partners in this endeavor.

Some theaters will necessarily be more advanced than others in international maritime cooperation. In the European area, NATO has long held the preeminent role and has devised a universal set of standards. While the European Union (EU) has played no role to date, it is showing increased interest in adding to maritime security and domain awareness in the European theater.

An example of a mission in need of universal standard principles is the rescue and repatriation of refugees at sea. While all mariners consider it their sacred duty to rescue survivors at sea, nation states adjacent to the incident show no uniform willingness to provide these victims safe harbor. The International Maritime Organization (IMO) has done much work in this area, but nations have yet to take on this formal obligation.

Technological tools are being used widely and effectively. In particular, the Automatic Identification System (AIS) is required for all vessels exceeding 300 tons. This is the maritime equivalent of IFF. However, while some of the information it provides is mandatory, others (such as cargo) are optional. Thus, unless there are universal mandatory standards, its utility can be limited. Extending the AIS to smaller vessels can also be a huge benefit, since 90 percent of all vessels are smaller than 300 tons. For example, Singapore requires all vessels to have AIS installed and is much more capable of detecting the "anomalies" that require closer observation. The world needs to move in this direction.

Working Discussion: Findings and Recommendations for Maritime Strategy



Moderator:

Ambassador Paul D. Taylor

Senior Strategic Researcher, Strategic Research Department, U.S. Naval War College

Working Discussion: Findings and Recommendations for Maritime Strategy

Ambassador Paul D. Taylor
Senior Strategic Researcher, Strategic Research Department
U.S. Naval War College

In this session, participants used networked computers equipped with Web-IQ™ software to register anonymously their responses to five broad questions related to the themes treated by the previous panels. Their written comments were displayed and provided the basis for oral discussion. The highlights of the written and oral comments in response to each of the questions follow.

Question 1. How can U.S. maritime strategy contribute to U.S. grand strategy over the next two to three decades?

The maritime strategy should focus on issues that transcend short-term politics. It should seek, for example, to make the connection between economic and physical security. In a globalized world, both opportunities and threats are heavily maritime in nature. Prosperity depends on secure maritime transportation and healthy fisheries and marine environment, and homeland security cannot be assured without acting beyond the shoreline.

Participants saw many opportunities opening for a fresh look at strategy: a new secretary general at the United Nations, a change of leadership in the U.S. Congress coming in January 2007, and a new U.S. administration taking office in January 2009. The new administration will have to publish a new National Security Strategy within its first eighteen months. All these openings give the Chief of Naval Operations and the commandants of the Marine Corps and the Coast Guard the chance to have a major influence on a new direction, not only for maritime strategy but for grand strategy as well.

The preparation of a new maritime strategy also presents an opportunity to reunite the sea services with the country and to restore appreciation of the United States as a maritime nation. It can also make the point that U.S. grand strategy is maritime, because it concerns how the United States will use the sea to achieve its goals. The United States cannot affect the places it wants to influence without using the sea. For the United States to be a land power anywhere but in North America, it must also be a sea power.

Question 2. How can economic and security strategies be formulated and executed to maximize the outcomes in both domains?

Economics and security may not be distinct domains. Broader than defense, security includes economic, energy, and environmental security. A constant of U.S. economic strategy has been its emphasis on open trade and investment, and security strategy can support that objective. It should do so in a way that avoids unnecessary interference with the market.

Just as security is necessary for markets to function and for the economies of the United States and its commercial partners to flourish, healthy economic performance creates the resources needed for the forces that provide maritime security. Globalization of manufacturing and research and development is a recent phenomenon with security implications. Similarly, an

economic policy that results in large amounts of U.S. sovereign debt being held by foreign states may affect U.S. security by reducing freedom of action.

While globalization generally increases economic prosperity, it is not without its costs. In addition to causing economic dislocations, globalization can conflict with cultural and social values, especially in traditional societies. Some of these negative effects can be mitigated by strengthening institutions that prevent abuses, like banking supervision and the rule of law generally.

Organizationally, the U.S. government is not well structured to integrate economic and security considerations. The agencies primarily responsible for economics, Treasury, Commerce, and the U.S. Trade Representative's Office, talk only rarely with the agencies principally charged with security, namely Defense, State, and Homeland Security. The National Security Council has not functioned well as a coordinating body to bring the work of the two groups together. More movement of professional personnel from agency to agency could facilitate the coordination of complex strategies.

Question 3. What are the implications for maritime strategy of rising economic powers, e.g., China and India?

As they continue to grow economically, both China and India will increase their dependence on the maritime domain to transport their exports and import energy and other raw materials. This factor can provide the basis for cooperation with the United States, emphasizing common interests and shared responsibilities for the security of seas.

Several participants opined that China and India would find it difficult to cooperate on maritime security because they had many areas of friction and tension. China's rivalry with the United States could also hinder cooperation, and China's growing economic ties with other Asian nations could result in a loss of U.S. access to bases in the region. In this event, Guam and Pearl Harbor would become increasingly important and the United States might have to increase its reliance on aircraft carriers. India may not be the natural strategic partner of the United States that some have hoped. Even if the two countries share interests, improvement of their relationship requires patience and difficult negotiation. Both China and India see their rise as naturally related to a decline of the United States.

Maritime strategy needs to recognize the unique demands of different regions. In contrast to East Asia, the greatest need in West Africa is probably protection of fisheries and other assets in exclusive economic zones—EEZs. Also, it is important to recognize the importance of other regions beyond Asia, for example, Latin America and Russia.

While many participants stressed the need to work with emerging powers to persuade them to adopt a cooperative approach to maritime strategy, one suggested that success would depend on the willingness of emerging powers to accommodate themselves to a global economic system led by the United States. He commented that the difficulty Germany had working within the *Pax Britannia* late in the nineteenth century was not an encouraging precedent. Another expert noted that China and India had already bought into the global system, and not all the important institutions were dominated by the United States in any case.

Question 4. How can a maritime strategy integrate responses to traditional threats from states and nontraditional threats from nonstate actors?

Participants suggested two general approaches to dealing with these two categories of threats. One was a balanced fleet with multipurpose forces and adaptable and flexible sailors and marines. The other was a bimodal navy, with one part focused on one type of threat and the

other on the other type. Responding to traditional threats may require combat. Conversely, a key requirement in dealing with nontraditional threats is sustainability, because the effort may have to go on for years.

A good place to start in designing the maritime strategy would be to parse out who would be responsible for any type of threat. Is a problem primarily one of law enforcement at sea, for example, in which case the Coast Guard should be front and center? If it is a land issue, the Marine Corps should have the lead among maritime forces.

In the case of terrorism, planners should focus their attention on weapons of mass destruction. The world may have to live with certain terrorist activities, but shipping WMD by sea cannot be tolerated. The maritime equivalent of air traffic control could help in this effort.

Question 5. What do our friends and allies expect from U.S. maritime strategy, and what can the United States expect from them?

The United States cannot by itself do what is needed to execute a maritime strategy. Therefore, it must necessarily find ways to work with other countries.

Everyone should expect each state to act in its own best interests. This approach implies a high degree of cooperation among countries whose interests overlap. To facilitate this process, the United States needs to be inclusive and sensitive to the particular approaches of less familiar maritime partners, for example, Pakistan in CTF-50. Often it would be a mistake for the United States to speak of leading a maritime coalition or even setting the agenda. Tsunami relief succeeded because it was a self-organizing and mutually supporting humanitarian effort.

The United States needs to hear out its friends and partners. The country shares a huge commonality of interests with other countries, but U.S. officials sometimes kill dialogue by emphasizing the war on terror, which some others do not see as a war. NATO's Operation Active Endeavor has succeeded because, even though it has counterterrorism and counterproliferation objectives, naval forces are expected to do something about illegal immigration and drug trafficking. The operation has fostered cooperation by dealing with interoperability and confidence building.

The International Seapower Symposium and regional seapower symposia provide useful fora for developing cooperation among navies based on shared interests. Combatant commanders are also in a good position to develop cooperative maritime activities within their areas of responsibility. The Chiefs of Defense Conference in the Pacific region has been a good vehicle for this coordination and might be strengthened by creation of a permanent secretariat. In the Americas, the U.S. Southern Command has worked with countries in the region to develop national military strategies, which provide a strategic rationale for organizing security cooperation.

Concluding Discussion: Findings and Recommendations for Maritime Strategy



Moderator:

Dr. Richmond M. Lloyd

William B. Ruger Chair of National Security Economics, U.S. Naval War College

Concluding Discussion: Findings and Recommendations for Maritime Strategy

Dr. Richmond M. Lloyd
William B. Ruger Chair of National Security Economics
U.S. Naval War College

In this session, participants were asked to suggest areas of research that should be explored further by the Navy as it develops a future maritime strategy. These research topics will inform multiple lines of research supported by the Navy through future workshops, conferences, and research projects.

A most useful area of study is energy. The overlap of energy security, national security, and national strategy is not always considered in depth. If you focused on energy strategy and maritime strategy, you would have a very interesting project. This involves a large number of countries throughout the world.

Different consuming countries have adopted different strategies for securing their energy. India and China are “pressing every button” they can to secure energy. They are using many ways, since energy is so important to sustaining economic growth. At their level of development, a 1 percent rate of growth in energy supplies equates to a 1 percent rate of growth in their GDP. If they cannot secure increasing amounts of energy, then the rate of growth of their economies will slow. This raises a political issue: how does a nation explain to itself that it cannot get all the energy that it needs or wants? A useful line of research is the study of the internal political decision-making process used within a nation to develop its energy strategy. A comparative study of China, India, Japan, and others would be revealing.

You need to go beyond the study of just a few consuming countries. You need the perspectives of both consumers and producers. At a recent conference in Istanbul it was striking how energy security means different things to different nations. It is important to understand and reconcile these competing definitions. Within the consumer group, for example, there are two competing definitions. Countries like China want to lock up supplies physically through upstream equity investments in the energy supply chain. In contrast, the American idea is to get oil to the market and let it then flow based on market forces.

This workshop purposely did not have a panel explicitly dealing with energy because several follow-on workshops will be devoted to this most important issue. The Naval War College will hold a conference on “Maritime Implications of China’s Energy Strategy” on 6–7 December 2006. In early 2007 there will be a workshop that will include energy issues and maritime strategy. The suggestions made here will be very helpful.

The environment and resources in general are another set of important issues. Climate change is being taken more seriously, and energy is an important aspect of it. The many contributing factors need to be dealt with in a more holistic fashion. The energy strategy study done by the Rocky Mountain Institute a few years back is an example of such an approach.

Drought is a major concern in the Asia Pacific region, including Australia and China as well as elsewhere. Food security is tied in as more crops are potentially diverted to biofuels. Water insecurity is a very big issue in China. Water insecurity should be the focus of a separate conference.

An entire workshop should be devoted to proliferation of weapons of mass destruction and maritime strategy. Investment in nuclear power plants as part of various nations' energy strategies has proliferation implications. At a recent international law workshop held here, many participants expressed concern over the future viability of the nuclear nonproliferation regime. How many scofflaws will it take to weaken international cooperation and take down the nuclear nonproliferation regime?

While we talked about international cooperation here, it is equally important to strengthen interagency cooperation within the U.S. government. How do we get out of the agency stovepipes so that all elements of power—diplomatic, information, military, and economic (DIME)—are brought to bear in a coordinated fashion? Recent proposals to apply the concept of Goldwater-Nichols-type legislation to all agencies is worth exploring. It was suggested that you have to get into the personnel system right down to the individual. Until incentives are in place to cooperate, bosses will not be supportive and may even penalize cooperation. The sea-change within the military toward joint assignments since Goldwater-Nichols, where now such assignments are mandatory for promotion and sought after as career-enhancing, was cited as a positive example.

Development and security is another important research area. While we discussed ways to deal with threats and challenges (the supply side), it was suggested that we need to look at the demand reduction side. This means greater focus on all instruments of power. Many of the challenges emanate from the need for social, political, and economic development. Two examples are crop substitution in Colombia being hampered by the lack of roads and infrastructure to get legal products to market, and the ring road in Afghanistan.

Additional suggestions are bringing together all the major maritime participants from big container shipping companies to port authorities; and exploring ways to empower the Navy in building partnership capacities through changes in policy, legislation, or funding.

Finally, it is all about resources. Can a single naval force structure handle the full range of missions, or is there a need for more specialization and a division of labor? What is the final criterion for deciding how much is enough?

Concluding Remarks

Dr. Richmond M. Lloyd
William B. Ruger Chair of National Security Economics
U.S. Naval War College

During this workshop we have explored how a maritime strategy could further the twin goals of economic prosperity and security, two objectives that most nations of the world seek and share in common.

Our intent was to provide a collegial forum for the exchange of ideas and perspectives that would create a solid research foundation for the development of a maritime strategy. You have provided us with a very rich menu of ideas and concepts, as well as many pragmatic suggestions that will be of value to the Navy as it formulates a maritime strategy in support of the U.S. grand strategy.

I want to thank all of you for the research you did in preparing your papers and for your thoughtful contributions throughout this workshop. Your papers and the extensive discussions we had within the focus area of each panel provide many valuable insights and significant perspectives. We hope that your work here will provide you with the building blocks for further dialogue, research, and future publications.

We will quickly produce a monograph that will include all of your papers and summaries of our discussion throughout the workshop. We expect to have this monograph available online for the general public in early December. (Our website is <http://www.nwc.navy.mil/nsdm/Rugerpapers.htm>.) Printed copies will be available in early 2007. (Send request for printed copies to the William B. Ruger Chair of National Security Economics at richmond.lloyd@nwc.navy.mil.)

We will keep you informed of follow-on workshops and conferences that will be of professional interest to you and will benefit from your participation.

Again, thank you so very much for the extensive work you did in preparing for and participating in this workshop.

Participant Biographies

Rear Admiral Jacob L. Shuford, USN

President, U.S. Naval War College

Rear Admiral Jacob L. Shuford was commissioned in 1974 from the Naval Reserve Officer Training Corps program at the University of South Carolina. His initial assignment was to USS *Blakely* (FF 1072). In 1979, following a tour as Operations and Plans Officer for Commander, Naval Forces Korea, he was selected as an Olmsted Scholar and studied two years in France at the Paris Institute of Political Science. He also holds master's degrees in public administration (finance) from Harvard and in national security studies and strategy from the Naval War College, where he graduated with highest distinction.

After completing department head tours in USS *Deyo* (DD 989) and in USS *Mahan* (DDG 42), he commanded USS *Aries* (PHM 5). His first tour in Washington included assignments to the staff of the Chief of Naval Operations and to the Office of the Secretary of the Navy, as speechwriter, special assistant, and personal aide to the Secretary.

Rear Admiral Shuford returned to sea in 1992 to command USS *Rodney M. Davis* (FFG 60). He assumed command of USS *Gettysburg* (CG 64) in January 1998, deploying ten months later to Fifth and Sixth Fleet operating areas as Air Warfare Commander (AWC) for the USS *Enterprise* Strike Group. The ship was awarded the Battle Efficiency "E" for Cruiser Destroyer Group 12.

Returning to the Pentagon and the Navy Staff, he directed the Surface Combatant Force Level Study. Following this task, he was assigned to the Plans and Policy Division as chief of staff of the Navy's Roles and Missions Organization. He finished his most recent Pentagon tour as a division chief in J8—the Force Structure, Resources and Assessments Directorate of the Joint Staff—primarily in the theater air and missile defense mission area and the *Abraham Lincoln* Carrier Strike Group. His most recent Washington assignment was to the Office of Legislative Affairs as Director of Senate Liaison.

In October 2001 he assumed duties as Assistant Commander, Navy Personnel Command for Distribution. Rear Admiral Shuford assumed command of Cruiser Destroyer Group 3 in August 2003. He became the fifty-first President of the Naval War College on 12 August 2004.

Professor Craig H. Allen

Charles H. Stockton Professor of International Law
U.S. Naval War College

Professor Craig H. Allen is the Charles H. Stockton Professor of International Law, U.S. Naval War College, and the Judson Falknor Professor of Law, University of Washington, Seattle, Washington. Professor Allen joined the University of Washington School of Law faculty in 1996, following his retirement from the U.S. Coast Guard. His teaching and research interests include maritime and international law, national and homeland security law, and constitutional law issues in the conduct of international relations. He is a licensed master mariner, a fellow in the Nautical Institute and the Royal Institute of Navigation, and a member of the U.S. Maritime Law Association and the U.S. Navigation Safety Advisory Council. Professor Allen is on the board of editors of *Ocean Development and International Law* and authored *Farwell's Rules of the Nautical Road* (Naval Institute Press, 2005). His forthcoming book *Maritime Counterproliferation Operations and the Law* will be published by Praeger in early 2007. He is

on leave from the University of Washington for the 2006–2007 academic year while serving on the faculty of the Naval War College.

Commander Alan L. Boyer, USN

Military Professor

National Security Decision Making Department, U.S. Naval War College

Commander Alan Boyer is a 1987 graduate of the U.S. Naval Academy and a surface warfare officer. He teaches strategy, security, and force planning to mid- and senior-grade U.S. and international military officers and mid-grade U.S. government civilian personnel. Commander Boyer also conducts research on international security issues, military technology, energy, Central Asian and European affairs, globalization, and economic statecraft. He was a government adviser to the 2006 Defense Science Board Summer Study on Technology Vectors. His latest research project was on the challenge of maritime security in the Mediterranean. Commander Boyer's recent work includes "U.S. Foreign Policy in Central Asia: Risks, Ends, and Means," *Naval War College Review* (Winter 2006) and "Recreating the Silk Road: The Challenge of Overcoming Transaction Costs," *The China and Eurasia Forum Quarterly* (November 2006).

Dr. Stephen Philip Cohen

Senior Fellow, Foreign Policy Studies Program

Brookings Institution

Stephen Philip Cohen has been senior fellow in Foreign Policy Studies at the Brookings Institution since 1998. In 2004 he was named by the World Affairs Councils of America as one of the five hundred most influential people in the field of foreign policy.

Professor Cohen was a faculty member at the University of Illinois from 1965 to 1998. From 1992–93 he was Scholar-in-Residence at the Ford Foundation, New Delhi, and from 1985–87, a member of the Policy Planning Staff of the U.S. Department of State, where he dealt with South Asia. He has taught at Andhra University (India), Keio University (Tokyo), and Georgetown University, and now teaches in the South Asian program of Johns Hopkins School of Advanced International Studies.

Dr. Cohen regularly appears on American national radio and television, and many foreign radio and television services. He has served on numerous study groups examining Asia sponsored by the Asia Society, the Council on Foreign Relations, the Asia Foundation, and the National Bureau of Asian Research; he is currently a member of the National Academy of Sciences Committee on International Security and Arms Control and a trustee of the Public Education Center. Dr. Cohen was the cofounder and chair of the workshop on Security, Technology and Arms Control for younger South Asian and Chinese strategists, held for the past ten years in Pakistan, India, Sri Lanka, and China, and was a founding member of the Research Committee of the South Asian strategic organization, the Regional Centre for Security Studies, Colombo.

Dr. Cohen has written, coauthored, or edited ten books. These include *The Idea of Pakistan* (September 2004), *India: Emerging Power* (June 2001, with Japanese, Indian, Chinese, and Taiwanese editions), *The Pakistan Army* (revised edition, 1998), *The Indian Army* (revised edition, 2000), the coauthored *Brasstacks and Beyond: Perception and Management of Crisis in South Asia* (1995), *India: Emergent Power?* (2002), and *Perception, Politics, and Security in South Asia: The Compound Crisis of 1990* (2003). Edited books include *Nuclear Proliferation in South Asia* (1990) and *South Asia after the Cold War* (1993), and a coauthored book on the Kargil and 2002 crises is nearing completion.

Professor Cohen received B.A. and M.A. degrees in political science from the University of Chicago, and a Ph.D. in political science from the University of Wisconsin. He has conducted research in China, Britain, India, Pakistan, the former Soviet Union, and Japan. He received grants from several major foundations and serves as a consultant to numerous government agencies.

Dr. Richard N. Cooper

Maurits C. Boas Professor of International Economics
Harvard University

Richard N. Cooper is vice chairman of the Global Development Network and a member of the Trilateral Commission, the Council on Foreign Relations, the Executive Panel of the U.S. Chief of Naval Operations, the Aspen Strategy Group, and the Brookings Panel on Economic Activity. He has served on several occasions in the U.S. government, as chairman of the National Intelligence Council (1995–97), Undersecretary of State for Economic Affairs (1977–81), Deputy Assistant Secretary of State for International Monetary Affairs (1965–66), and senior staff economist at the Council of Economic Advisers (1961–63). He was also chairman of the Federal Reserve Bank of Boston (1990–92). He studied at the London School of Economics as a Marshall Scholar, and he earned his Ph.D. at Harvard University.

Recent Publications

- *Boom, Crisis, and Adjustment* (with others)
- *Macroeconomic Management in Korea, 1970–1990* (with others)
- *Environment and Resource Policies for the World Economy*
- *What the Future Holds* (with others)

Rear Admiral (LH) Philip Hart Cullom, USN

Director for Strategy and Policy
OPNAV

A native of Flossmoor, Illinois, Rear Admiral Philip Hart Cullom graduated with distinction from the U.S. Naval Academy in 1979 with a bachelor's degree in physics. He also holds a master's degree in business administration with distinction from Harvard Business School.

At sea, his first assignment, after completing the Navy's Nuclear Propulsion Training Program, was onboard USS *Truxtun* as main propulsion officer and reactor training assistant. During this tour he was named Forces Afloat Junior Officer of the Year (1984) for the Pacific Northwest by the Retired Officers' Association. From 1989 to 1990, as Operations Officer of the USS *Jesse L. Brown*, he participated in Caribbean drug interdiction operations and joint operations with South American navies during UNITAS XXX. Throughout Operation Desert Storm he served as reactor electrical assistant of USS *Dwight D. Eisenhower*. From 1993 to 1994, as Executive Officer of USS *Mobile Bay*, he participated in Operation Southern Watch in the Arabian Gulf. During 1998 and 1999, he served as Commanding Officer USS *Mitscher*, deploying to the Mediterranean, Adriatic, and North Sea. The ship was awarded the Meritorious Unit Commendation for its 1998 deployment and the Golden Anchor and Battle Efficiency Awards for 1999. As Commander, Amphibious Squadron Three, Rear Admiral Cullom deployed in August 2003 as Sea Combat Commander for the First Expeditionary Strike Group (ESG-1) in support of operations Iraqi Freedom and Enduring Freedom.

Ashore, Rear Admiral Cullom was a shift engineer and staff training officer for the A1W nuclear prototype at Idaho National Engineering Laboratory, and later served as special assistant to the Chief of Naval Operations' Executive Panel (OP-00K). Selected as a White House Fellow (1994–1995), he served as the special assistant to Dr. Alice Rivlin, Director of the Office of Management and Budget, working principally on policy involving national security. He was subsequently assigned to the Joint Staff (J-8 Directorate) as a defense resource manager, analyzing federal and defense-wide macroeconomic and budgetary trends. Post-command, he headed the Strategy and Concepts Branch (N513) on the OPNAV staff and served as director of Defense Policy and Arms Control for the National Security Council at the White House under both presidents Clinton and Bush. From late 2001 until 2003, he served as the head of Officer Programs and Placement (PERS 424/41N) for all surface nuclear-trained officers. After completing his major command assignment, he served as the chief of staff for Commander, Second Fleet/Commander, Striking Fleet Atlantic until September 2005. In October 2005 he reported as Director, DEEP BLUE in the Office of the Chief of Naval Operations, Washington, D.C., and in February 2006 he was assigned as the director for Strategy and Policy (N5SP) on the OPNAV staff.

Rear Admiral Cullom's personal awards include the Defense Superior Service Medal (two awards), Legion of Merit (three awards), Defense Meritorious Service Medal, Navy Meritorious Service Medal (two awards), Navy and Marine Corps Commendation Medal (three awards), Joint Service Achievement Medal, and Navy and Marine Corps Achievement Medal.

Andrea J. Dew

Research Fellow
Belfer Center for Science and International Affairs
Kennedy School of Government, Harvard University

Andrea Dew is a research fellow at the Belfer Center for Science and International Affairs. Ms. Dew's research interests include anthropology, political psychology, and all aspects of the impact of technology on society and security. Her current research focuses on space, satellites, international security, and counterterrorism. Ms. Dew's dissertation at the Fletcher School, Tufts University, looks at commercial remote sensing and U.S. space and security policy, and she has co-authored a book on how to analyze modern insurgencies and nonstate armed groups, titled *Insurgents, Terrorists, and Militias: The Warriors of Contemporary Combat* (with Richard H. Shultz, Columbia University Press, 2006).

Dr. Peter Dombrowski

Chairman, Strategic Research Department
U.S. Naval War College

Dr. Peter Dombrowski is a professor and chair of the Strategic Research Department at the Naval War College. Previous positions include director of the Naval War College Press, co-editor of *International Studies Quarterly*, associate professor of political science at Iowa State University, and defense analyst at ANSER, Inc. Dr. Dombrowski is the author of over thirty books, articles, monographs, book chapters, and government reports. He recently completed two edited volumes, *Guns and Butter: The Political Economy of the New International Security Environment* (Lynne Reinner, 2005) and *Naval Power in the Twenty-first Century: A Naval War College Review Reader* (Naval War College Press, 2005), and a book coauthored with Eugene Gholz, *Buying Military Transformation: Technological Innovation and the Defense Industry* (Columbia University Press, 2006). He received his B.A. from Williams College and an M.A. and Ph.D. from the University of Maryland.

Dr. Thomas R. Fedyszyn

Security, Strategy, and Forces Course Director
National Security Decision Making Department
U.S. Naval War College

Dr. Fedyszyn is the course director of the Security, Strategy, and Force course. He joined the Naval War College faculty after a 31-year naval career, serving in six different cruisers and destroyers. His most recent military assignments were as Russia branch chief for the International Military Staff at NATO Headquarters in Brussels and as the U.S. naval attaché to Russia. A former surface warrior, he commanded the USS *Normandy* (CG 60) and USS *William V. Pratt* (DDG 44) and also served in numerous strategy, policy, and long-range-planning billets for the Office of the Secretary of Defense and the Chief of Naval Operations. He received an M.A. and a Ph.D. from Johns Hopkins University and was a former member of the political science faculty at the U.S. Naval Academy. He specializes in NATO, naval strategy, Russian politics, and American foreign policy.

Vice Admiral Lutz Feldt, German Navy (Retired)

During his long and distinguished career in the German Navy, Vice Admiral Feldt served in numerous command, operational, and staff billets. He has extensive experience in the areas of maritime cooperation and NATO operations. In September 2006, he was a speaker at the U.S. Naval War College's inaugural Combined Forces Maritime Component Commanders course. Prior to his retirement in 2006, he served as the Chief of German Naval Staff. He also served as the Commander in Chief, German Fleet; Commander, Military District Command I, Coast; Assistant Chief of Staff Operation and Logistic, HQ AFNORTHWEST; Commander, Destroyer Flotilla; Chief of Division PV, FMOD; Chief of Branch, Personnel Policy Matters, Naval Staff; Squadron Commander of the 2nd Frigate Squadron in Wilhelmshaven; and Commanding Officer of the destroyer *Hessen*. During the first six years of his career Vice Admiral Feldt served in the German Minecountermeasure Flotilla, three years as a Commanding Officer of a MSC. In these years he gained a lot of experience in littoral warfare at the tactical and operational levels.

Dr. Ellen L. Frost

Visiting Fellow, Institute for International Economics
Adjunct Research Fellow, Institute for National Strategic Studies, National Defense University

Dr. Ellen L. Frost is a visiting fellow at the Institute for International Economics and an adjunct research fellow at the National Defense University's Institute of National Strategic Studies (INSS). She has just written a book on the Asian integration movement and the resurgence of maritime Asia. She is also advising INSS on the rise of China, its impact on the rest of Asia, and its implications for U.S. policy.

Dr. Frost served as counselor to the U.S. Trade Representative (1993–95), as Deputy Assistant Secretary of Defense for International Economic and Technology Affairs (1977–81), in various positions in the Treasury Department (1974–77), and as a legislative assistant in the U.S. Senate (1972–74). During the 1980s she worked in the corporate sector. She is the author of *For Richer, For Poorer: The New US-Japan Relationship* (1987) and *Transatlantic Trade: A Strategic Agenda* (1997), and is coeditor of *The Global Century: Globalization and National Security* (2001), as well as numerous articles. In 2002–04 she was a member of the National Commission on U.S.-Indonesian Relations. She currently serves on the Public Diplomacy Council and on the board of trustees of EnterpriseWorks/VITA, a nongovernment, nonprofit organization dedicated to poverty relief in the world's poorest countries.

Dr. Frost is a member of the Council on Foreign Relations in New York and the International Institute of Strategic Studies in London. Born in Boston, Massachusetts, in 1945, she received a Ph.D. from the Department of Government at Harvard University, where she specialized in the politics and foreign policy of China; an M.A. from the Fletcher School of Law and Diplomacy, where she studied international relations and Soviet foreign policy; and a B.A. from Radcliffe College.

Dr. Rohan Gunaratna

Head, International Centre for Political Violence and Terrorism Research
Nanyang Technological University, Singapore
Senior Fellow, Jebson Center for Counter-Terrorism Studies
Fletcher School of Law and Diplomacy

Rohan Gunaratna is a researcher based in Singapore whose field of specialisation is terrorism, particularly Islamic terrorism, and especially groups in Southeast Asia such as Jemaah Islamiyah (Indonesia) and Abu Sayyaf (the Philippines). He is the author of *Inside Al-Qaeda*, as well as many other publications. Dr. Gunaratna has links throughout media, academic, and policy making circles.

Dr. Gunaratna is the director of the International Center for the Study of Terrorism and Political Violence at the Institute for Defence and Strategic Studies of Nanyang Technological University in Singapore; a senior fellow at the Centre for the Study of Terrorism and Political Violence, University of St. Andrews, Scotland; and an honorary fellow at the International Policy Institute for Counter Terrorism in Israel. He has also served as a consultant to the United Kingdom and United States law enforcement communities.

Lieutenant Colonel Kelly P. Houlgate, USMC

Strategic Analyst
Strategic Initiatives Group, Headquarters Marine Corps

Lieutenant Colonel Kelly P. Houlgate is an infantry officer and has served with the 1st, 2nd, 3rd, and 4th Marine Divisions as a Rifle Platoon Commander, Rifle Company Executive Officer, Weapons Company Commander, Rifle Company Commander, and Reserve Infantry Company Inspector-Instructor. He has served as a tactics instructor and platoon commander at both the Basic School and Officer Candidates School. LtCol Houlgate has completed two afloat Mediterranean deployments, first with SPMAGTF-Theodore Roosevelt, and then with the 24th Marine Expeditionary Unit (MEU), and has deployed to Okinawa, Kuwait, Iraq, Somalia, and off the coasts of Haiti and Bosnia.

LtCol Houlgate graduated from the U.S. Naval Academy and has attended the Amphibious Warfare School and School of Advanced Warfighting. He currently serves as a strategic analyst in Headquarters Marine Corps' Strategic Initiatives Group.

Dr. Timothy D. Hoyt

Professor of Strategy and Policy
U.S. Naval War College

Dr. Timothy D. Hoyt is a professor of Strategy and Policy at the U.S. Naval War College, where he has taught since 2002. He lectures on strategy, terrorism, counterinsurgency, military transformation, and contemporary conflict, and also teaches an elective course on South Asian security. He received his undergraduate degrees from Swarthmore College, and his Ph.D. in

International Relations and Strategic Studies from Johns Hopkins University's Paul H. Nitze School of Advanced International Studies in 1997. Professor Hoyt taught graduate courses at Georgetown University's School of Foreign Service from 1998–2002, in addition to teaching for the Naval War College's College of Distance Education's Strategy and Policy seminar at the Pentagon. In October 2003, he testified before two subcommittees of the House Committee on International Relations regarding terrorism in South and Southwest Asia. Dr. Hoyt is the author of *Military Industries and Regional Defense Policy* (Routledge, 2007), which examines the role of the military industry in the national security policies of India, Israel, and Iraq, and is beginning work on several book-length projects, including an analysis of American military strategy in the twenty-first century and a study of the strategy of the Irish Republican Army from 1913–2005.

Dr. Richmond M. Lloyd

William B. Ruger Chair of National Security Economics
U.S. Naval War College

Dr. Richmond M. Lloyd is a member of the Security, Strategy, and Forces faculty in the National Security Decision Making Department at the U.S. Naval War College and holds the William B. Ruger Chair of National Security Economics. He is the director of the Latin American Studies Group, which coordinates all college activities in Latin America. His research and teaching interests include strategy and force planning, national security and economics, defense and international economics, and logistics. He is coeditor of nine textbooks for the Naval War College on strategy and force planning. He lectures on contemporary national defense topics at various sites throughout the United States and South America. He chaired the Naval War College's self-study efforts that led to congressional authorization for the college to award a M.A. degree in National Security and Strategic Studies and to the accreditation of this degree.

Dr. Mohan Malik

Professor, Asia-Pacific Center for Security Studies

Dr. Mohan Malik is a professor at the Asia-Pacific Center for Security Studies in Honolulu, Hawaii. He is a trained sinologist and has research interests in Asian geopolitics and nuclear proliferation issues. Dr. Malik is the author of *Dragon on Terrorism, The Gulf War: Australia's Role and Asian-Pacific Responses*, coeditor of *Religious Radicalism and Security in South Asia*, and editor of *Australia's Security in the 21st Century, The Future Battlefield*, and *Asian Defence Policies*. He has contributed numerous book chapters and published over 150 articles on Asian security issues in journals such as *Asian Affairs*, *Asian Survey*, *Arms Control*, *Australian Journal of International Affairs*, *China Quarterly*, *China Report*, *China Brief*, *Comparative Strategy*, *Contemporary Security Policy*, *Contemporary Southeast Asia*, *Issues and Studies*, *Jane's Intelligence Review*, *Journal of Northeast Asian Studies*, *The Korean Journal of Defense Analysis*, *Orbis*, *Pacific Affairs*, *Pacifica Review*, *Parameters*, and *World Policy Journal*. He has also written for the *International Herald Tribune*, the *Japan Times*, the *Australian*, *Asia Times*, *YaleGlobal Online*, *Force*, the *Honolulu Star-Bulletin*, and the *Hindustan Times*. Dr. Malik has done consultancy work for the Science Applications International Corporation (SAIC), the Australian Department of Defence (Army), and the UK-based Jane's Information Group.

Professor Don Marrin

Assistant Research Professor
War Gaming Department, U.S. Naval War College

Professor Don Marrin is an assistant research professor in the War Gaming department at the U.S. Naval War College in Newport, Rhode Island, where he is responsible for developing and executing war games, workshops, and symposia for naval, joint, and coalition audiences.

A graduate of the U.S. Naval Academy and U.S. Naval War College, Professor Marrin served as a surface warfare officer in the U.S. Navy for 22 years, where he developed an expertise in C4ISR (Command and Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance) while serving at U.S. Central Command, on the U.S.S. *Dwight D. Eisenhower* Battle Group staff, and at the Naval War College.

Professor Marrin has served as the game director for a number of events associated with the Global War on Terrorism (GWOT), including a series of events conducted at the Naval War College to examine maritime-related issues following the attacks of 9/11/2001. He coordinated the seminar portion of the 17th International Seapower Symposium, conducted at the Naval War College in September 2005, and served as the moderator for the MDA panel discussions at the NCC/NSC regional symposia in Yokosuka, Japan, in October 2005 and Naples, Italy, in April 2006. He is currently involved with the planning and execution of the New Maritime Strategy project being conducted on behalf of the Navy Staff (OPNAV N3/5).

Dr. John H. Maurer

Chairman, Strategy and Policy Department
U.S. Naval War College

John H. Maurer, the chairman of the Strategy and Policy department, is a graduate of Yale University and holds an M.A.L.D. and Ph.D. in International Relations from the Fletcher School of Law and Diplomacy. Before joining the faculty of the Naval War College, he was executive editor of *Orbis: A Journal of World Affairs* and held the position of senior research fellow at the Foreign Policy Research Institute. In addition, he served on the Secretary of the Navy's advisory committee on naval history. He is the author or editor of books examining the outbreak of the First World War, military interventions in the developing world, and naval arms control between the two world wars, and a recently published study about Winston Churchill's views on British foreign policy and strategy. At present, he is working on several research projects: a study about the transformation that occurred in naval warfare during the era of the two world wars, and a book about Winston Churchill and Great Britain's decline as a world power. In June 2001, he received the U.S. Navy's Meritorious Civilian Service Award.

Rear Admiral Michael McDevitt, USN (Retired)

Director, Center for Strategic Studies
Center for Naval Analyses

Rear Admiral Michael McDevitt, U.S. Navy (Ret.), is a vice president and director of the Center for Strategic Studies, a division of the Center for Naval Analyses (CNA)—a not-for-profit, federally funded research center in Washington, D.C. The Center for Strategic Studies conducts research and analyses that focus on strategy, political-military issues, and regional security studies. The center has a particularly strong Asian security research team, known as Project Asia, as well as growing Middle East and European teams.

During his navy career Rear Admiral McDevitt held four at-sea commands, including an aircraft carrier battlegroup. He received a bachelor of arts degree in U.S. history from the University of Southern California and a master's degree in American diplomatic history from Georgetown University. He is also a graduate of the National War College in Washington, D.C.

He was the director of the East Asia Policy office for the Secretary of Defense during the first Bush administration. He also served for two years as the director for Strategy, War Plans and Policy (J-5) for US CINCPAC. Rear Admiral McDevitt concluded his 34-year active-duty career as the commandant of the National War College in Washington, D.C.

In addition to his management and leadership responsibilities as the founder of the Center for Strategic Studies he has been an active participant in conferences and workshops regarding security issues in East Asia and has had a number of papers published in edited volumes on this subject.

Professor Jeffrey H. Norwitz

John Nicholas Brown Academic Chair of Counterterrorism and
Professor of National Security Decision Making
U.S. Naval War College

Professor Jeffrey H. Norwitz completed a B.S. in criminal justice at Eastern Kentucky University. Following Army service as a commissioned officer, Mr. Norwitz entered law enforcement in Colorado Springs, where, as a patrol officer, his specialties included SWAT team sniper as well as commander of the bomb squad. He joined the Naval Criminal Investigative Service in 1985 and served tours in California; Washington, D.C.; Japan; and Rhode Island; specializing in counterintelligence and counterespionage. He twice received the Navy's Meritorious Civilian Service Medal. In 2001, Mr. Norwitz graduated from the Naval War College and joined the NSDM faculty. In addition to crafting an elective course concerning terrorism, he has been published in the *Naval War College Review*, *Military Review*, *Journal of Homeland Security*, and *Officer Review*. His scholarly work appears in *Terrorism and Counterterrorism: Understanding the New Security Environment* (McGraw-Hill, 2003); *American Defense Policy*, 8th ed. (Johns Hopkins University Press, 2005); and *Practical Bomb Scene Investigation* (CRC Press, 2006). His articles have been translated into Spanish and Portuguese for publication in South America. He lectures extensively across the country and for allied militaries on matters relating to terrorism and homeland security. Mr. Norwitz holds the John Nicholas Brown endowed Academic Chair of Counterterrorism at the U.S. Naval War College and is presently working on a book concerning armed groups: *Studies in National Security, Counterterrorism, and Counterinsurgency*.

Dr. Mackubin Thomas Owens

Associate Dean of Academics for Electives and Directed Research and
Professor of National Security Decision Making
U.S. Naval War College

Dr. Mackubin Thomas Owens is associate dean of Academics for Electives and Directed Research and professor of National Security Affairs at the U.S. Naval War College in Newport, Rhode Island. He specializes in the planning of U.S. strategy and forces, especially naval and power projection forces; the political economy of national security; national security organization; strategic geography; and American civil-military relations. From 1990 to 1997, Dr. Owens was editor-in-chief of the quarterly defense journal *Strategic Review* and adjunct professor of International Relations at Boston University. Dr. Owens is a contributing editor to *National Review Online*, writing primarily on security affairs and the character of American republicanism.

government, and a senior fellow of the Foreign Policy Research Institute in Philadelphia. His articles on national security issues have appeared in such publications as *International Security*, *Orbis*, *Armed Forces Journal*, *Joint Force Quarterly*, *The Public Interest*, *The Weekly Standard*, *Defence Analysis*, U.S. Naval Institute *Proceedings*, *Marine Corps Gazette*, *Comparative Strategy*, *National Review*, *New York Times*, *Los Angeles Times*, *Jerusalem Post*, *St. Louis Lawyer*, *Washington Times*, and *Wall Street Journal*. He is coeditor of the textbook *Strategy and Force Planning*, now in its third edition, for which he also wrote the chapters titled “The Political Economy of National Security” and “Thinking About Strategy.” He currently is working on a book for the University Press of Kentucky tentatively titled *Sword of Republican Empire: A History of U.S. Civil-Military Relation*. Dr. Owens earned his Ph.D. in politics from the University of Dallas, a master of arts in economics from Oklahoma University, and his BA from the University of California at Santa Barbara.

Dr. Barry R. Posen

Ford International Professor of Political Science
Massachusetts Institute of Technology

Barry R. Posen is Ford International Professor of Political Science at the Massachusetts Institute of Technology and the director of the Security Studies program. He is also on the Executive Committee of Seminar XXI, an educational program for senior military officers, government officials, and business executives in the national security policy community. He has written two books, *Inadvertent Escalation: Conventional War and Nuclear Risks* and *The Sources of Military Doctrine*. The latter won two awards: The American Political Science Association’s Woodrow Wilson Foundation Book Award, and Ohio State University’s Edward J. Furniss Jr. Book Award. His most recent article is “Command of the Commons: The Military Foundation of U.S. Hegemony,” *International Security* 28, no. 1 (Summer 2003). Prior to coming to MIT, he taught at Princeton University, and he has also been post-doctoral fellow at the Center for International Affairs at Harvard; Council on Foreign Relations International Affairs fellow; Rockefeller Foundation International Affairs fellow; Woodrow Wilson Center fellow, Smithsonian Institution; and most recently Transatlantic fellow, German Marshall Fund of the U.S. Dr. Posen’s current activities include research on European Union Defense Policy, the role of force in U.S. foreign policy, and innovation in the U.S. Army, 1970–1980.

Articles

“The Security Dilemma and Ethnic Conflict,” *Survival* 35, no. 1, Spring 1993, pp. 27–47 (.pdf, 1.33Mb).

“The Struggle against Terrorism: Grand Strategy, Strategy, and Tactics,” *International Security* 26, no. 3 (Winter 2001/02), pp. 39–55.

“Exit Strategy: How to Disengage from Iraq in 18 Months,” *Boston Review*, January/February 2006.

Dr. Derek S. Reveron

Associate Professor of National Security Decision Making
U.S. Naval War College

Dr. Derek S. Reveron is an associate professor of National Security Affairs at the Naval War College in Newport, Rhode Island. He received a diploma from the Naval War College, an M.A. in political science, and a Ph.D. in public policy analysis from the University of Illinois at Chicago. He specializes in U.S. foreign policy, civil-military relations, and intelligence. He is the

author of *Promoting Democracy in the Post-Soviet Region* (2002), the editor of *America's Vice-roys: The Military and U.S. Foreign Policy* (2004), and the coeditor of *Flashpoints in the War on Terrorism* (2006). His numerous book chapters and articles have appeared in *Orbis*, *Defense and Security Analysis*, *International Journal of Intelligence and Counterintelligence*, *Low Intensity Conflict & Law Enforcement*, and the *National Review Online*. Additionally, he sits on the editorial board for the *Defense Intelligence Journal* and the *Naval War College Review*. Before joining the Naval War College faculty, Dr. Reveron taught political science at the Joint Military Intelligence College, National Defense University, and the U.S. Naval Academy. As an officer in the Navy Reserves, he has held various positions with NR VP-90, Atlantic Intelligence Command, Office of Naval Intelligence, Joint Analysis Center (European Command), Supreme Headquarters Allied Powers Europe, and the Defense Intelligence Agency.

Dr. Leif R. Rosenberger

Economic Adviser
U.S. Pacific Command

Dr. Leif R. Rosenberger has been the economic adviser at the U.S. Pacific Command since 1998 and has worked for four combatant commanders. He has a dual reporting chain: He reports to Rear Admiral Michael C. Tracy, director for Strategic Planning and Policy (J5), and Admiral William J. Fallon, Commander, U.S. Pacific Command. He is also a member of Admiral Fallon's Special Staff.

Dr. Rosenberger analyzes the strategy and performance of 43 economies in Asia and the Pacific. As chairman of PACOM's Economic and Security Working Group, he harmonizes the economic and security elements in all aspects of PACOM activities (including maritime security, the war on terrorism, war plans, and theater security cooperation activities with all the countries in Asia and the Pacific.

Dr. Rosenberger also plays a large role in strategic outreach activities to shape the socioeconomic environment in Asia and the Pacific.

- He collaborates with U.S. embassies in Asia and U.S. economic agencies in Washington (such as U.S. Agency for International Development, Commerce, Treasury, and the Federal Reserve) on the formulation and execution of U.S. economic policies.
- He initiated and stood up the first U.S. interagency conference to address the Underlying Conditions that Foster Terrorism held at the Army War College in 2005. The second conference is planned for PACOM in March 2006.
- He performs outreach with academe, international government organizations (such as the UN Development Program, the World Bank, and the IMF), Asian regional organizations (such as the Asia Pacific Economic Cooperation [APEC] forum and the Asian Development Bank), nongovernment organizations (NGOs), and, last but not least, the all-important private sector.
- He works closely with Professor Stuart Hart at Cornell University Business School to harmonize U.S. military activities with ground-breaking activities in the private sector and NGOs to reduce poverty and tap into the fortune at the bottom of the socioeconomic pyramid.
- On the military side he collaborates with the Civil Military Affairs branch of the U.S. Army to improve the lives of Asian and Pacific people at the grassroots level.

Dr. Rosenberger is on the Board of Advisers at World Info in Silicon Valley, California, and the Board of Southeast Asian Advisers at the National Bureau of Asian Research (NBR) in Seattle,

Washington. In recent years he has done pro bono work as the senior fellow for International Finance and vice chairman of the Board at Trans-Oceanic International Limited, a humanitarian organization based in Hawaii with global reach.

Before coming to PACOM, Dr. Rosenberger was professor of economics for ten years at the U.S. Army War College, where he held the General Douglas MacArthur Academic Chair of Research. He won five faculty-writing awards. His *America and the World Economy* course was one of the largest and most popular two-semester courses ever given at the Army War College. He also worked at the Strategic Studies Institute, CIA, and DIA.

With the exception of the chapter on North Korea, Dr. Rosenberger is the author of each chapter in Volume 1 and Volume 2 of *Asia-Pacific Economic Update, 2005*. He also wrote two chapters in Volume 3 (“Towards Food Security” and “A Socio-Economic Strategy Against Violent Extremism”). In addition, he is the author of Volume 1 of *Asia-Pacific Economic Update, 2002* and co-author of *Asia-Pacific Economic Update, 2000*.

Former drug czar General (Ret.) Barry R. McCaffrey favorably reviewed his book *America’s Drug War Debacle* (Avebury, 1996). In recent years he has published “The Major Economic Challenge in the Global Security Environment: Competing in an Interdependent World,” in Max G. Manwaring, Edwin G. Corr, Robert H. Dorff, *The Search for Security U.S. Grand Strategy for the Twenty-First Century, 2003*; “The Changing Face of Economic Security in Asia,” in Sheldon Simon (ed.), *The Many Faces of Asian Security* (NBR, 2001); “Understanding Changes in Asia’s Economic Landscape,” in Paul Taylor (ed.), *U.S. Strategic Traditions and Regional Realities* (U.S. Naval War College, 2001); and “Asia’s New Economic Volatility,” in *The Journal of East Asian Affairs*, Fall/Winter 2000.

Dr. Rosenberger currently teaches International Finance and Trade in the Executive MBA Program at the University of Hawaii. He spent his sabbatical year of 1997 as a visiting scholar on the economic faculty at Harvard University, funded by a Secretary of the Army Research and Study Fellowship. He was also a visiting professor of international relations at Providence College and an adjunct professor of economics and political science at Dickinson College.

He is a 1989 graduate of the U.S. Army War College, where he was a winner of the student writing award. He also attended the Senior Leaders in National Security Program at the Kennedy School of Government at Harvard University. He holds a B.A. with honors from Harvard University, a master’s from Boston University, and a Ph.D. from Claremont Graduate School. He studied Chinese politics and foreign policy at UCLA and did postdoctoral work in international business at Brigham Young University.

Ambassador Paul D. Taylor

Senior Strategic Researcher, Strategic Research Department
U.S. Naval War College

Ambassador Taylor is a senior strategic researcher in the Strategic Research department of the Center for Naval Warfare Studies and senior adviser to the Latin American Studies Group of the Naval War College. Currently also teaching elective courses on Latin America and the United States and on international economics, he spent a career in the U.S. Foreign Service and four years as an international business executive responsible for establishing the Latin America subsidiary of a multinational satellite broadcasting firm. He served as U.S. ambassador to the Dominican Republic and was assigned in 1992 as professor and international affairs adviser to the President of the Naval War College. He taught the core curriculum in the Strategy and Policy department and in the National Security Decision Making department.

He also was Deputy Assistant Secretary of State responsible for overall relations with Mexico and economic relations with Latin America and the Caribbean. Ambassador Taylor was assigned diplomatic duties for periods of two to three years each in Ecuador, Thailand, Brazil, Spain, and Guatemala. He served for two years on the staff of the Peace Corps in Washington and in Ecuador and for three years on active sea duty as a commissioned officer in the U.S. Navy. His languages include Spanish and Portuguese. He studied economics at Harvard, where he received an MPA, and politics at Princeton, leading to an AB.

Dr. Eric V. Thompson

Director of the International Affairs Group at the Center for Naval Analyses

Eric V. Thompson is the director of the International Affairs Group at the Center for Naval Analyses, the U.S. Navy and Marine Corps' federally funded research and development center. Dr. Thompson's specialty is Middle East political/military affairs. He has traveled extensively in the Middle East and worked closely with U.S. and regional and military leaders. His most recent work has addressed Iraq and Afghanistan, military cooperation with member states of the Gulf Cooperation Council, military-to-military relations with Egypt, interoperability with Turkish and Algerian maritime forces, and coalition-building for military operations in the region.

Dr. Thompson's research and analysis extend beyond the Middle East region. He has participated in studies of interoperability with allied navies, the implications of the deployment of theater ballistic missile defense systems, the use of distance learning technology in preparing for coalition operations, the effectiveness of Partnership for Peace programs, and future security cooperation priorities for the U.S. military.

Dr. Thompson is also an adjunct professor at Catholic University of America, where he teaches graduate classes on terrorism and national security issues. Prior to joining CNA, he was an adjunct professor of international relations and history at the Virginia Military Institute, where he taught courses in Middle East history, Middle Eastern politics, and American government, and served as the director of the Model Arab League program.

His publications have appeared in the *Middle East Journal*, *The Miller Center Report*, and *Middle East Insight*, and he has presented papers at several conferences including those of the American Political Science Association, the Association of Third World Studies, and the Foreign Policy Association.

Eric V. Thompson holds a Ph.D. and M.A. in Foreign Affairs from the University of Virginia, and a B.A. in political science from Vassar College.

Dr. Geoffrey Till

Professor of Maritime Studies
Defence Studies Department, King's College London

Formerly the dean of academic studies at the Joint Services Command and Staff College, Dr. Till is now professor of maritime studies in the Defence Studies department at King's College London. Before that he was professor of history at the Royal Naval College Greenwich. He has taught at the Britannia Royal Naval College Dartmouth; in the Department of Systems Science at the City University; in the Department of War Studies, King's College London, where he completed his M.A. and Ph.D., and for the Open University. With the help of a NATO Defence fellowship he was a visiting scholar at the U.S. Naval Postgraduate School, Monterey; later he held the Foundation Chair in Military Affairs at the U.S. Marine Corps University, Quantico,

Virginia. He is also currently visiting professor at the Armed Forces University, Taiwan and senior visiting research fellow at the Institute of Defence and Strategic Studies, Singapore.

Research Interests

- Modern Maritime History
- Contemporary Maritime Strategy and Policy
- Security in the Asia-Pacific Region

Selected Publications/Conference Papers

- *Airpower and the Royal Navy 1914–1945* (London: Jane's, 1979)
- *Maritime Strategy and the Nuclear Age* (London: Macmillan, 2nd edition, 1984)
- *The Sea in Soviet Strategy* (London: Macmillan, 2nd edition, 1989)
- *Modern Sea Power* (London: Brassey's, 1987)
- Series editor of a ten-strong series on navies and technology (London: Brassey's)
- Coeditor of the Navy Records Society Centenary Volume, 1993
- Series editor of the Frank Cass Naval History and Policy series
- *Amphibious Warfare* (Leicester: SCSi, 1997)
- *Seapower: Theory and Practice* (London: Frank Cass, 1994)
- Geoffrey Till (ed.), *Seapower at the Millennium* (Gloucester: Sutton Publishing, 2001)
- With G. D. Sheffield (eds.), *Challenges of High Command in the Twentieth Century* (London: Macmillan/Palgrave, 2003)
- *Seapower: A Guide for the 21st Century* (London: Frank Cass, 2004)
- "Maritime Airpower in the Interwar Period: The Information Dimension," in *Journal of Strategic Studies* 27, no. 2 (June 2004)
- "Holding the Bridge in Troubled Times: The Cold War and the Navies of Europe," in *Journal of Strategic Studies* 28, no. 2 (April 2005)
- *The Development of British Naval Thinking* (London: Routledge, 2006)

CDR Paul J. Tortora, USN

OPNAV N3/5 Strategic Action Group

CDR Paul Tortora received his commission in May 1989 from the U.S. Naval Academy, with a BS in mathematics and minor in Spanish, graduating with merit. Upon completion of submarine officer nuclear power training, CDR Tortora served on the fast-attack nuclear submarines USS *Sturgeon* and USS *Batfish*, deploying to the North Atlantic and Mediterranean, earning his gold dolphins as a submarine warfare officer and qualifying as a naval nuclear engineer.

CDR Tortora was then assigned to the U.S. Naval Academy, where he served as the senior admissions officer, Spanish instructor, and submarine warfare instructor. During this assignment he requested and received a lateral transfer into Naval Intelligence. His first assignment as an intelligence officer was at the Office of Naval Intelligence (ONI), where he served as the division head for the International Programs Office and special programs coordinator for bilateral efforts in the Mediterranean and Middle East.

From May 2000 to June 2002, CDR Tortora served as the intelligence officer for Amphibious Squadron Eight, deploying with the *Wasp* and *Bataan* Amphibious Ready Groups. During Operation Enduring Freedom, he provided afloat intelligence to the initial seizure of Camp Rhino in Afghanistan and assisted in the targeting and capture of fleeing Taliban and al-Qa'ida, to include detention and interrogation afloat. Following this deployment, he was awarded the National Military Intelligence Association's VADM Rufus Taylor Award for Intelligence Leadership.

CDR Tortora then served as the deputy executive assistant to the Director of Naval Intelligence, immediately followed by assignment as the Secretary of the Navy's personal intelligence officer from Nov 2002–June 2004, where he also served as the naval aide, and director, White House Liaison Office. From July 2004–Oct 2006, CDR Tortora was assigned as the director of training for the Center for Naval Intelligence, Dam Neck, Virginia.

CDR Tortora is currently assigned to the OPNAV N3/N5 Strategic Action Group at the Pentagon, which is tasked with coordinating efforts on the new maritime strategy development.

His personal decorations include the Legion of Merit, Meritorious Service Medal, Navy Commendation Medal, and Navy Achievement Medal. He holds a M.S. in management from the University of Maryland University College, and an M.A. in National Security and Strategic Studies from the Naval War College.

Robert O. Work

Senior Defense Analyst at the Center for Strategic and Budgetary Assessments (CSBA)
Areas of Expertise: Defense Strategy, Defense Transformation, and Maritime Affairs

Mr. Work has written several monographs on naval transformation, the Littoral Combat Ship, future fleet platform architectures, and seabasing. He has also prepared a series of reports on the future defense challenges, including the changing nature of undersea warfare; power projection against regional nuclear powers; and power projection against future antiaccess/area denial networks. He has also directed and analyzed several war games for the Office of Net Assessment, Office of the Secretary of Defense; contributed to DoD studies on global basing and emerging military missions; and provided support for the 2006 Quadrennial Defense Review.

During a distinguished 27-year career in the Marine Corps, Robert Work held a range of key command, leadership, and management positions. He retired from the Marine Corps in 2001 after 27 years of active service, having served in a variety of command and staff positions. His last assignment was as military assistant and senior aide to the Honorable Richard J. Danzig, 71st Secretary of the Navy.

Mr. Work has a bachelor of science in biology from the University of Illinois, a master of science in systems management from the University of Southern California, a master of science in space operations from the Naval Postgraduate School, and a master's in international public policy from the Johns Hopkins School of Advanced International Studies. He is an adjunct professor at George Washington University, where he teaches defense analysis and roles and missions of the armed forces, and is a visiting lecturer at the Canadian Forces College.